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ABSTRACT

This collection of articles focuses on bicycling and hosteling as important recreational activities that can (a) help conserve energy, (b) benefit the economy offering a low-cost pasttime, and (c) stimulate foreign travel to the U.S. Articles include the following: (a) "Bicycling and Hosteling--An American Partnership," (b) "The Return of the Bicycle," (c) "Hosteling in America Today," (d) "The User's Role in Bikeway Planning," (e) "Bikecentennial--Pioneering the first Trans-America Bicycle Trail," (f) "Planning for Bikeways," (g) "Federal Highway Bicycling Programs," (h) "Bike Trip Routing," (i) "Bicycle Security--A New Industry," (j) "A Northeastern Seaboard Bicycle Trail Concept," (k) "Pacific Coast Bicycle/Hostel Route," (l) "Developing a Regional Bikeway System: A Lake Central Region Workshop," (m) "A Green Light for Hostels in California," (n) "Virginia-Delaware Corridor Study," (o) "Progress on the Wisconsin Bikeway System," (p) "The Fairfax County, Va., Trail Program," (q) "BART/TRAILS: A Study," (r) "Cycling and Hosteling around the Nation," and (s) "Bibliography of Recent Bicycling and Hosteling Publications." (JS)

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Bicycling and Hostels

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Winter 1974 Report No. 34

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Bicycling and Hosteling—An American Partnership

Bicycling and hosteling are hot outdoor recreation topics in America today.

These compatible activities can help achieve energy conservation. Both promise significant implications in the national economy as counter-inflationary, due to low costs for participation, and have the potential to stimulate and increase foreign travel to the United States.

A strong thread of cycling and hosteling runs through planning for Bicentennial Celebrations for 1976; these activities are "coming on strong." As a means of defining current status and projecting these activities into the future, the Bureau of Outdoor Recreation called on leaders of hosteling and bicycling for materials presented in this 34th report of "Outdoor Recreation Action."

Regional Offices of the Bureau, other Federal agencies, States, local governments, and concerned private organizations also contributed reports. A Lake Central Region workshop in Chicago October 16-17 on the Development of a Regional Bikeway System and earlier BOR regional conferences generated a great amount of the material.

We believe the information presented will contribute to the future success of these two recreation pursuits.

James G. Watt
Director, Bureau of Outdoor Recreation

An American Youth Hostel at Truro, Mass., serves Cape Cod.

The Return of the Bicycle

In the halcyon days, before the turn of the century, folks were wont to call the era, "The Golden Age of the Bicycle." Along with the horse and buggy, the bicycle was a major source of transportation for millions of Americans.

In fact, the first highway lobby was an active group still known today as the League of American Wheelmen. These celebrated gentlemen and gentle women went out into the hustings, drumming up support for bicycle transportation facilities.

When the bicycle was caught and passed by the horseless carriage, those bicycle highways became automobile highways. But now in the latter half of the 20th century the bicycle has come around again.

This time some sentimentalists are calling it, "The New Golden Age of the Bicycle." But whatever it's called, it's certainly a return to the bicycle and for those who consider "Daisy, Daisy" the national anthem, it's once again a grand time.

The statistics surrounding the current return to the bicycle are staggering. Consider if you will one major fact: For the last three years—1972, 1973, 1974—sales of bicycles in the United States surpassed those of the automobile for the first time since World War I.

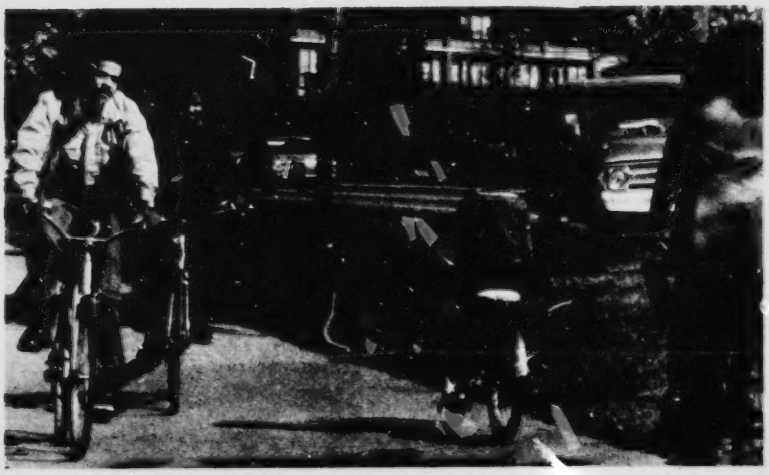
In three years, nearly 50 million bicycles increased the bicycle population to more than 70 million. These new sales and the return to the bicycle by adults swelled the number of Americans on two-wheelers to over 100 million. Yes, a new golden age indeed.

There are a great many switches and double switches in the bicycle-automobile situation. Bicycle enthusiasts helped develop the first highways. Bicycle technicians and mechanics created devices which were instituted into automotive development such as steering, gearing, braking, and tires.

Today, the bicycle is creating the double-switch, now seeking once again its rightful place on America's highways and byways. The bicycle deserves to be recognized as a viable transportation device, unique in many ways. Bicyclists want safe places to ride their two-wheelers either in the traffic mix or along specially constructed and safe bikeways.

One of the interesting examples of the double switch in bicycle technology is that now for the first time the bicycle is actually taking back from the automobile. Devices have been created which automatically switch gears for the cyclist into a "drive" ratio, not unlike the automatic trans-

Americans using bicycles now total about 100 million.



By James J. Hayes
Executive Director
Bicycle Manufacturers Association

5

missions on millions of automobiles.

The familiar, smooth, sleek, lightweight, multi-speed bicycle has become a solid means of transportation and recreation for Americans of all ages. Meanwhile, nothing has changed for the nation's younger population, who still use their bikes to get to school and in a variety of recreational situations, which always have the added benefits of health and physical fitness.

All of this points to a vital part of today's bicycle picture. If America's cyclists are to ride safely they must have safe bikeways and routes, but even more important is a move to sounder educational practices so that all cyclists, young and old alike, are made fully aware of the rules of the road and the dangers inherent in cycling in traffic.

It is not enough that an occasional bicycle safety program is sponsored by local police, civic club, or scouting organizations. Youngsters have a way of forgetting occasional learning experiences.

With the return of the bicycle comes the inherent responsibility of government, Federal, State and local, to institute sound bicycle safety education programs in the schools.

Accident statistics are always alarming and the injuries and even deaths of anyone regrettable. Over the years it has become apparent that youngsters, particularly those between the ages of 5 and 14, are the most susceptible to injury.

If these statistics are accurate, it devastatingly points a finger at a failure in the educational program to prepare young people properly in driving their bikes. Driving is an interesting word choice in this instance because that is actually what a youngster is doing, especially when he crosses the sidewalk or leaves the school yard into the frantic, frenetic world of traffic.

The normal, healthy young person rarely thinks of his bicycle in terms of traffic, rules of the road, or whatever. To him the bicycle is inherently entwined in his play experience. The bicycle is a toy and it's fun and games.

But the direct opposite is true. Bikes are not toys. They are unique two-wheeled conveyances and traffic is a dangerous area. The bicycle is no competitor to a multi-ton automobile. In an accident with a car the bike and its driver always come out the loser, sometimes by losing life itself.

And kids are not the only culprits. With the massive return to the bike by adults, one American manufacturer last year found that more than 20 percent of sales went to people in the 21-54 age group for personal bicycle use; older citizens have a safety responsibility as well. Their knowledge of the rules of the road is appalling.

What all this points out is quite simple. If there is to be a prolonged continuation of the return of the bicycle there must be a renewed vigor in implementing sound, sensible bicycle safety education programs, and networks of bikeways in urban and rural areas. State and local parks must be expanded to embrace the bicycle.

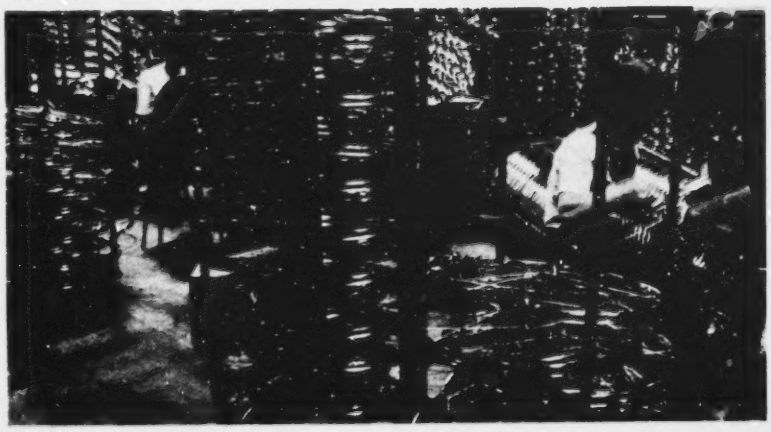
The signs are excellent that this will be the case. The Federal Government, in many of its departments—Interior and Transportation in particular, are recognizing the bicycle.

Bikeways, safety education, hosteling, et al, all come into play. As we near the Nation's 200th birthday, one of the oldest and most versatile transportation vehicles—the bicycle—is back with gusto. Visionaries see the day when the U.S.A. is covered with a network of bikeways. They also see schools in every State with bicycle safety education programs from kindergarten to high school graduation.

If they see it correctly, the return of the bicycle will be complete.

Cyclists seem hardly aware of jet plane landings and takeoffs at National Airport, Washington, D.C.

Huffman Manufacturing Company workers assemble streamlined 2-wheelers.



Hosteling in America Today

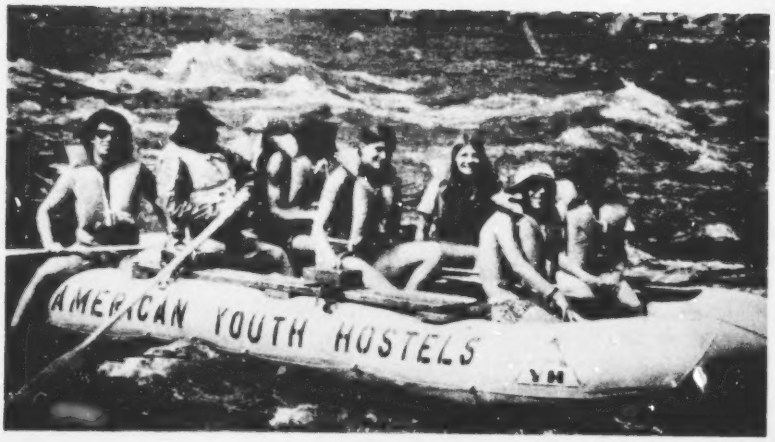
The year 1974 has been and promises to continue to be a year of great strain and stress in the American economy. The consequent drop in tourism and travel throughout the United States and abroad may well prove this to be the year that American hosteling finally began to come into its own.

Ever since the hostel movement began in the United States back in 1934 when the first American hostel was established in Northfield, Mass., the great difference between the hostel movement in the United States and most countries abroad has been the lack of government help and support. Today, this long delayed support finally appears to be on the way; the Department of the Interior is in the vanguard.

With the cooperation of the National Park Service which this year added two hostels to the four heretofore existing in National parks, American Youth Hostels now has six National park hostels in its string of 145 youth hostels across the country; more possibilities are in the offing. Department of the Interior and other Federal authorities and agencies see in the establishment of more hostels throughout the country one of the big answers to the need for low cost accommodations for young U.S. travelers and those coming from abroad to visit during the Bicentennial Year celebration. In addition to the National Park Service, the AYH staff is working with the Bureau of Outdoor Recreation and the Job Corps section of the Interior Department to develop plans to get the labor and materials for an estimated half dozen or more pre-fabricated hostels to be erected on se-

Youthful visitors to Cape Cod find this American Youth Hostels facility convenient, comfortable, and economical.

By American Youth Hostels, Inc.



An American Youth Hostels rafting party floated Middle Gore Canyon stretch of the Colorado River.

lected and approved Federal, State, and municipally-owned locations.

The Northeast Region of the Interior Department's Bureau of Outdoor Recreation is beginning a study to identify potential hostel sites in Delaware and Virginia. The study will be made cooperatively with State officials, American Youth Hostels, and other groups. The purpose of the study is to establish the feasibility of hostels in Virginia and Delaware.

Hosteling and bicycles have been closely associated since the 1934 AYH founding. The growing bike boom, combined with the energy crisis and the drive to prevent the pollution of the natural environment, in the past few years has raised AYH's historical drumbeating for the bicycle into a national movement for healthful and recreational means of travel. One of the results is that some State Legislatures have passed laws allocating a portion of highway funds and gasoline taxes to the development of bike trails and hostels. A leader among these States is California, which is now making plans and surveys which will ultimately result in the establishment of State-owned hostels on carefully selected sites. AYH is helping; because of its long experience with hostels over many years, the organization is hoping to have a hand in the management and operation of these facilities.

The unique and imaginative Bicentennial '76 organization which hopes to enlist an army of cyclists who will travel across the U.S. in 1976 along Bicentennial trails is searching for low-cost accommodations to house these cross country travelers. Bikecentennial '76 has the support of AYH and its members in the search. Hopefully, some of these accommodations will prove to be permanent hostel facilities in the years after the Bicentennial celebration.

All of this activity presages an unusual growth in the immediate future for AYH. In addition, AYH has been working hard on plans for the development and funding of its National Campus in Delaplane, Va., acquired in February 1973. This 62-acre site lies in a beautiful conservation area of Fauquier County in Northern Virginia, 60 miles west of Washington, D.C., and 15 miles east of the Skyline Drive entrance to the Shenandoah National Park. It is to be developed as a leadership training center for American Youth Hostels. Plans call for a demonstration hostel, classroom, and lecture facilities to be used in training leaders for its own travel and hosteling programs, and for the programs and requirements of other youth service agencies. A number of colleges and universities have included AYH's leadership training course as part of the curricula for Physical Education and Recreation majors; many give college credit for the course. These courses have heretofore been given at hostels throughout the country.

Once this center facility is completed, it will be used along with a hostel on the campus as a year-round field study center for elementary and secondary schools in the State. It also is designed as a pilot project for similar use of hostels by Boards of Education around the country. The strength and proliferation of the hostel movement in most countries abroad has included multi-purpose use of hostels while providing low cost overnight accommodations for young travelers.

This educational use of the more versatile hostel facilities has provided students with unstructured educational experience outside the regular school classroom. Subjects such as botany, geography, geology, astronomy, and other field studies, uninteresting in the formal classroom, spring to life in the natural surroundings of the hostel. Because of this, foreign governments have supported hostels as part of public educational obligations.

Aside from uses of hostels as facilities for young travelers, there is definitely the strong possibility they can render a larger service to the community in suitable locations in and adjoining large urban centers. American Youth Hostels facilities are open to people of all ages. A building in Fort Mason in the heart of San Francisco recently has been taken over by the National Park Service and offered to AYH. The AYH Golden Gate Council in the area is trying to raise funds to renovate the building; it would house close to 200 people. The facility would be very popular and serve many San Francisco visitors.

American Youth Hostels expresses appreciation to the various government agency officials who are giving important impetus to hosteling in America today. Hostels and related activities answer a great national need.

H-Bar-G Ranch Hostel at Estes Park, Colo., offers rustic accommodations in western surroundings.

American Youth Hostels, Inc.

American Youth Hostels is a non-profit organization, now in its 40th year, having been founded in 1934. Together with 47 other national hostel associations in the International Youth Hostel Federation, AYH helps provide low cost overnight facilities for youths throughout the world.

What is a chartered American Youth hostel?

It is a facility that provides low cost overnight accommodations for people traveling for health, education, and recreation. It has separate sleeping and washing facilities for the sexes. It has a common kitchen where youth can cook their own meals if desired. It has a common or recreation room where people can relax and exchange experiences and ideas; resident houseparents supervise the hostel. Overnight fees do not exceed the maximum set by AYH regulations for chartered facilities.

What is a Supplemental Accommodation?

It is a facility which is not strictly a hostel as described above in that it may lack one or more of the hostel features or charge higher overnight fees. It is chartered, however, in order to fill out a chain or series of reasonably priced accommodations in selected areas convenient to hostelers.

What is the overnight fee at hostels?

There are different hostel categories. Most standard hostels may charge up to a maximum of $2.50 per night; if air conditioning in summer or heat in winter is provided, a maximum of $3.25 may be charged. Supplemental accommodations may charge more depending on their particular circumstances.

Who keeps the overnight fee?

The facility owner keeps the fees generated from overnight use.

What does it cost to be chartered?

The cost is $10 per year, due annually on January 1st. Included is liability insurance coverage under AYH's comprehensive insurance plan.

What control is there over those using a hostel?

Complete control is maintained because hostels are open only to members of AYH or one of the other national hostel associations; they agree to abide by the rules, regulations, and customs of hosteling and AYH. On arriving at a hostel the card must be delivered to the houseparents in charge to be returned on departure provided no set rules or regulations have been disregarded. In case regulations are violated, the houseparent may retain the card and the member will not be permitted to obtain another card.

What does AYH offer to help establish a hostel?

The most important service AYH renders is to publicize a facility so that it can serve hostelers who are seeking the benefits and advantages offered by hostels. It does this by listing facilities in its Annual Guide and Handbook circulated free to all AYH members; there are now close to 75,000 in the United States. The facility is also listed in the International Handbooks published by the International Federation, circulated among more than 2 million international hostel association members.

AYH supplies facilities and their supervisors with hostel operations manuals and literature designed to make each facility successful and efficiently operated. AYH may also be able to assist in equipping each facility with bunks, blankets, mattresses, etc., and to help get suitable houseparents, if required.

What do Memberships in AYH Cost?

Memberships for youths under 18 years of age, are $5; for individuals over 18 years of age $10; for families, $12; and for organizations up to 25 in number such as Girl or Boy Scouts, $15.

People's Accommodation Network (PAN) Coalition

A number of national and regional non-profit, public interest organizations concerned with the availability of low-cost accommodations in the United States have joined together to form the People's Accommodation Network (PAN) Coalition. PAN proposes to develop and coordinate an integrated network of inexpensive overnight facilities for low-budgeted travelers, including established youth hostels, YMCA's, YWCA's, college dormitories, church property,

institutional retreat centers, and camping areas.

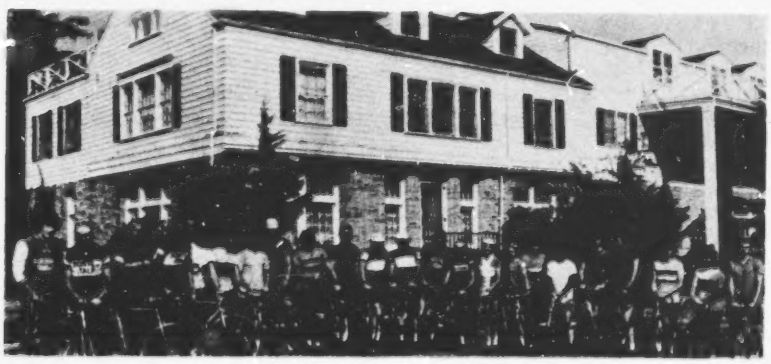
PAN proposes to serve as a clearinghouse for information for and about mobile youth and as a resource pool for the press, legislative bodies, private and governmental agencies. The Coalition has recently developed a set of broad guidelines including information to help communities interpret the need for and promote the development of low-cost accommodations. (See Bibliography, page 48.)

PAN's steering committee is made up of representatives from the Commission on Voluntary Service and Action, which coordinates the National effort; the U.S. National Student Association; Trancare, Inc., of Maryland, a hosteling organization concerned with the welfare of transient youths; American Youth Hostels; the United Church of Christ; the United Presbyterian Church; the National Board of the YMCA; and Camp Fire Girls.

The concept of a national network of hostels grew out of recognition that travelers will need low cost accommodations during the Bicentennial in 1976. The goal of the PAN Coalition is to go beyond the Bicentennial and to establish a continuing network of lodgings for travelers of all ages and origins.

Youthful hostelers share meals in an outing near Boulder House Youth Hostel, Boulder, Colo.

Boulder House Youth Hostel, Colo., served contestants in an Annual Boulder Criterion competition September 20, 1974.



Contact: Commission on Voluntary Service and Action, Room 665, 475 Riverside Drive, New York City, N.Y. 10027.

1976 International Youth Hostel Federation Conference in San Francisco

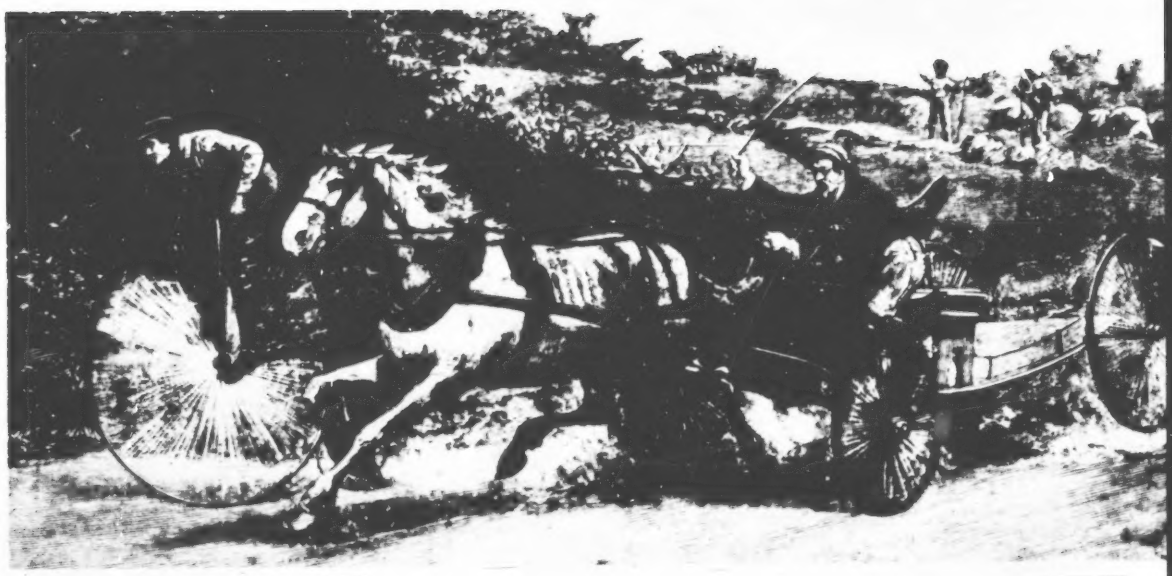
For the first time since its founding in 1932, the International Youth Hostel Federation will hold its Annual Conference in the United States in 1976. By accepting the invitation to host this conference extended by the American Youth Hostel organization, the International Federation is honoring its American member during the American Bicentennial Celebration.

This 31st Conference in IYHF history will bring more than 200 official delegates and visitors. They will represent 48 national and 14 affiliate hostel associations from 62 countries around the world. Beginning August 9th, the Conference will hold its business sessions on the Mills College campus in Oakland, Calif. Delegates will participate in various events and sightseeing trips in the San Francisco Bay area and visit National Park hostels and California tourist attractions.

There are 2,500,000 members in the International Youth Hostel Federation. Almost 26 million overnight stays were registered in 1973 at 4,500 youth hostels administered by the Federation throughout the world.

While there are only 145 hostels in the United States today, the Department of the Interior through the Bureau of Outdoor Recreation and the National Park Service, and other Federal and State agencies have begun cooperating to establish more hostels in selected Federal and State-owned locations.

Many of the delegates to the 1976 Conference will visit this country for the first time. All will be influential in their countries' hostel and youth movements. They report an overwhelming interest and desire by young nationals, accustomed to hosteling and staying at inexpensive hostels in their own countries, to visit the U.S.



The User's Role in Bikeway Planning

By Morgan Groves
Executive Vice President
League of American Wheelmen

A number of bicyclists in Southern California banded together to petition for a bikepath from the Los Angeles city limits to the nearby beach. Bikepath buttons with the slogan "Good Roads for Bicycles" were sold for $1.00 apiece to help finance the project.

Additionally, an elevated bikepath was proposed to run from downtown to the Pasadena area for commuter use. The first section was wide enough for four bicycles abreast.

The city of Seattle built 35 miles of bikepaths for bicyclists' exclusive use. Riverside, Calif., had an even more elaborate plan calling for an elevated roadway system with cloverleaf interchanges.

The above facts seem only vaguely possible in light of the usual concentration on planning for the automobiles, yet they were an accurate statement of the facts at the turn of the century. The Pasadena Freeway today follows the route of the Pasadena elevated bikeway. And Seattle's 35 miles of bikep disappeared to be rebuilt up current total of only eight miles.

It was the bicyclist who led the battle for better roads in both the United States and abroad. In the United States, cooperation between the League of American Wheelmen and the Department of Defense led to the first highway construction expenditures to increase domestic transportation opportunities for defensive and economic reasons.

The social, economic, cultural, and political influence of the bicycle in America is not widely known today, but the advent and wide popularity of the bicycle in the last decades of the 19th century established trends which have continued until today. Because the American Wheelmen were interested in and lobbied for good roads, it was natural that both road building concerns and the budding automobile industry would be attracted. The lineage of the American Road Builders Association and the American Automobile Association can be traced directly to the League of American Wheelmen.

Many technological innovations and mass production techniques, used even today, originated in the bicycle industry. Perhaps the most significant is the pneumatic tire invented by a Scottish veterinarian named Dunlop. Dr. Dunlop built the first pneumatic tire so his son's

tricycle would roll easier. It was picked up quickly by the bicycle industry. Its shock absorbing qualities, low rolling resistance, and durability helped to make not only the automobile, but the airplane a practical possibility.

Many people who figured prominently in the transportation revolution at the end of the 19th century got their start in the bicycle business. Almost everyone knows that the Wright Brothers built their flying machines in the back of their bike shop. Fewer know that Henry Ford was in the bicycle business, or that Barney Oldfield was a bike racer before he raced automobiles. And in a touch of irony, Ignatz Schwinn, the founder of the Schwinn Bicycle Company, built an automobile back in 1909.

It must also be noted, however, that the bicycle industry created some traditions that can hardly be considered useful or intelligent: The automobile industry is not really entirely responsible for the annual model change with its "all new" and "longer, lower and wider" and "better than ever" selling approach. The bicycle people started the annual model changes; during the bicycle shows of the late 19th century, the manufacturers went to great lengths to make each year's new model look just different enough from the preceding year that no self-respecting person would be seen on last year's model. The automobile industry accepted the model change gratefully.

When the automobile usurped the bike in the hearts of red-blooded Americans, the bicycle industry, in its struggle to survive, adopted a technique that was successful at the time, but that left effects that still bedevil us. It began to focus on children and considered the bicycle a toy. Consequently, for more than 60 years the bicycle was regarded as an imitation automobile, something to be endured until one could afford the real thing and a device no more worthy of adult consideration than a pogo stick. For 50 years or more the adult who rode a bicycle was regarded only with pity, scorn or detached amusement. There were no pillars of the community who rode bicycles.

But bicycles are back. Within the last 10 years we have been confronted with at least three kinds of energy crises. First came the recognition that labor saving devices were in many cases life taking devices. We discovered that as a nation we had grown flabby and weak. And as we found ways to save back-breaking labor, the incidence of heart disease, back trouble and crippling overweight increased dramatically.

When Dr. Paul Dudley White came to prominence as President Eisenhower's physician, and recommended that it would be a good thing if all of us rode a bicycle regularly, people began to listen and to take him seriously. A very few people turned to the bicycle as a solution to that kind of energy crisis.

In the 1960's, the environmentalists began to point out what we were doing to our environment with profligate spewing of pollutants into the atmosphere. The car was identified as the prime cause and culprit; a few people began to turn to the bicycle as the logical alternative. There were mock funerals where cars were buried and the mourners rode away on bicycles.

The energy crisis everyone talks about may have come at an appropriate time to help us realize that riding bicycles just might bring about an improvement in the quality of life with payoffs in reduced energy consumption, a better appreciation for the environment, and a surprise bonus—better health. With the dramatically increased use and prominence of the bicycle, it is understandable that many groups would come together around the country to try to respond intelligently to increasing demand for bicycle facilities. The largest and oldest bicycle user group in the United States offers some fairly intelligent assumptions and a few facts that are important.

Lest it appear, however, that the author is the official voice of all bicyclists, let me hasten to assure that nobody knows what the bicyclists want because as yet no one has conducted really extensive, in-depth

research. We have to operate on assumptions. We have to operate on educated guesses until we have something firmer. No organization today, neither the League of American Wheelmen nor the American Youth Hostels nor the Friends for Bikecology, can actually purport to speak for cyclists because no one of these organizations has a membership that even approaches one percent of the total number of bicycle users. As the reader may know, the bicycle riding public amounts to about 100 million and the League of American Wheelmen would boast if it had even one percent of the 100 million cyclists. The League now has some 10,000 members though it is working hard in buildling membership and finding ways to speak effectively and convincingly for all cyclists—even those who do not belong to the organization. For the last 10 years, the League of American Wheelmen has grown at a rate of 50 percent per year. It expects to double membership this year and is trying to grow from 10,000 to 100,000 members by the end of 1975.

But now to the assumptions. First, the inexperienced adult cyclist is uncomfortable sharing the roadway with cars. He is confounded with speed, noise, discourtesy, and lack of knowledge about the rules of the road as they apply to bicyclists.

If he were asked, the "typical" adult cyclist probably would agree that separated bikeways are the only way to provide safe street cycling. An active West Coast organization, Friends for Bikecology, has built a whole program on the premise that the only way to protect the cyclist from bicycle/motor vehicle accidents is to build a wall of separation between the cyclist and the motorist.

A third assumption: Motorists tend to view cyclists as unpredictable hazards and would, if the question were put in the right way, probably vote in favor of separated bikeways.

Assumption number 4: More experienced cyclists (the kind who could be considered "bike freaks") are generally apt to be very vocally opposed to separated bikeways and to present cogent arguments about how the road can be shared effectively with motorized traffic.

We must assume in the absence of reliable statistics and documented studies that many bicycle traffic problems today can be solved more effectively and economically by education and enforcement programs aimed at all road users than by a network of ill-planned and hastily-constructed bikeways. None of us has to search too long to find a cyclist who assumes that traffic laws do not apply to him. Or to the motorist who considers the cyclist a nuisance and irritant. LAW National headquarters has a growing file of instances where motorists have not been cited for traffic violations that resulted in the injury of cyclists.

Assumptions are sometimes easier to address than facts. There are, however, some facts that must be noted. Most important, perhaps, is that most State laws in keeping with the provisions of the Uniform Vehicle Code require a cyclist to use a bikepath where it is provided. That is a regulation apparently adopted from the European experience where cyclists are expected to use facilities provided. In Europe, however, many of the engineers who designed and built bicycle paths were quite familiar with the needs of cyclists and designed accordingly. In the United States, separate bikeways have tended to be designed by people whose concepts of the bicycle and the cyclist were governed by their image of the bicycle as a toy. Consequently, many bikeways are impractical. As a specific example, a section of new bikeway just constructed in Palatine, Ill., traversing a beautifully scenic section, provides a needed connection between residential areas and the Forest Preserve. Unfortunately, the bikeway seems to have been built with the design speed of approximately 3 miles per hour, for it has flat curves and in one case an off-camber curb at the bottom of a rather steep hill. Further, in one quarter-mile section, the bikepath crosses four streets. There are no warning signs posted on the bikepath at all.

A year ago, organized groups of

cyclists were standing up in loud opposition to bikeway plans because experience indicated that bikeways planned by highway engineers who were not cyclists, or recreation planners who were not cyclists usually failed to serve cyclists' needs adequately. There was and is some flaming rhetoric in bicycle circles against bicycle paths; within the last year, however, there have been a number of hopeful signs, like the conferences where planning authorities ask bicycle groups to participate in the process. The desired result, of course, is that bicycle facilities resulting from this kind of collaboration will meet the needs of all kinds of cyclists.

The League of American Wheelmen adopted a platform in December 1973 opposing any bikeway construction that would deny cyclists the right to use public roadways where appropriate or necessary. We excluded limited access and minimum speed roads. Our purpose was to avoid the kind of situation that has occurred in several communities where cyclists have been shunted to sidewalks or to poorly designed bike trails. In at least one community, there is statistical evidence that bikeways increased the likelihood of bicycle/motor vehicle accidents. We cannot afford that kind of bikeway.

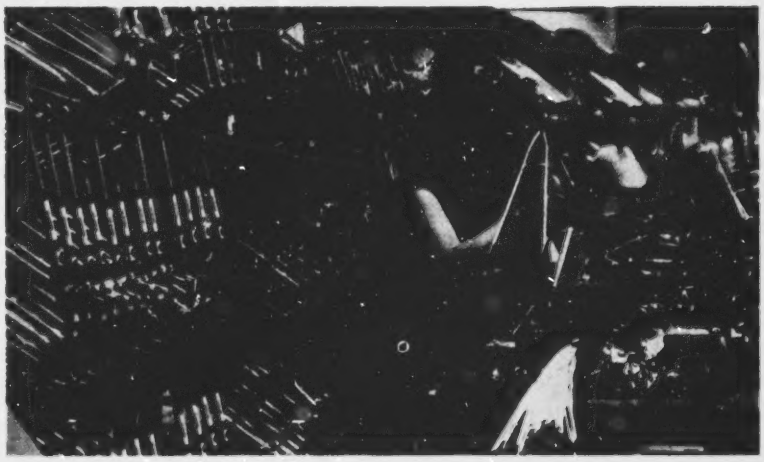
Now for some conclusions that may be assumptions but which seem fairly evident. First, the state-of-the-art of bicycle facility design is primitive: It has taken at least 50 years to arrive at relative sophistication in the design of highways. It seems vain to assume any kind of sophistication in bikeway design when none of us have been at it for more than 10 years.

There are intense and perhaps growing pressures to do *something* in the way of building bicycle facilities. We need a great deal more research, more pilot projects, and more experiments before committing big money to bicycle facility construction.

Finally, it seems almost self evident that bicycle use will grow and more bicycle facilities will have to be constructed. If we plan well, build intelligently, and work together, we can make the bicycle a vehicle of revolution in changing the American lifestyle and completing the national return to a less hectic existence.

Family happiness is a spin along the Potomac River shore, Washington, D.C.

Cycle frames receive attachments in a Huffman Manufacturing Company Plant.



Cycling is a good way to see historic Rock Creek Park, Washington, D.C., on a pleasant fall day.

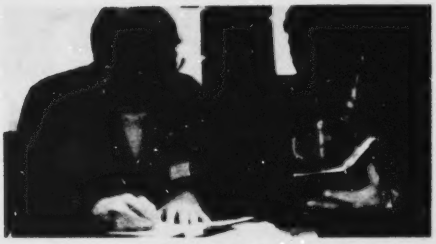
Bikecentennial—Pioneering the First Trans-America Bicycle Trail

"We may look for a time in the near future when a cycling route from the Atlantic to the Pacific will be made and mapped, and when good roads and good cycle-paths will be so connected in a continuous chain between the two great oceans that a cross-continent journey awheel will be the popular 10 weeks' tour of every cyclist whose time and purse will permit."

. . . **The Century Magazine,**
September 1896

This coast to coast trail envisioned nearly eighty years ago is soon to be a reality. The Trans-America Bicycle Trail, 4,100 miles in length, has already been ridden, and is now being readied for tens of thousands of American and international bicyclists to inaugurate as part of America's Bicentennial in 1976.

Just 10 years ago there were only 10-30 bicyclists each summer daring a cross-continent trek. Now with the reawakening of bicycling activity, the figure has jumped to 5,000 to 10,000 annually. This is just the start.



The author (left) confers with Robert M. Cleckner of Bicycle Institute of America.

New Organization Formed

A new organization, Bikecentennial, Inc., has been established to research, develop, and promote long distance bicycle routes. One year of intensive study has been completed. The work included interviews with Federal, State, and local government agencies; nationwide publicity drawing responses from more than 10,000 bicyclists; extensive trails and route studies; and establishment of close ties with the League of American Wheelmen and the American Youth Hostels.

Lack of Facilities Evident

Early the study learned that widespread growth in bicycle touring is held back due to a lack of facilities. In 1972, according to the Bureau of Outdoor Recreation's "Existing Trails Inventory," there were:

4,995 miles—Bicycling Trails
14,784 miles—Motor Trails
13,676 miles—Horseback Trails
26,247 miles—Hiking Trails

Bicycling requires approximately 4–6 times as much linear trail as hiking or horseback riding for a full day's outing, since the bicyclist covers 12–18 miles in an hour as opposed to a backpacker covering 2–4 miles. Although trails in and around urban areas answer part of the bicycle rider's immediate needs, long range planning of cross-state and cross-region facilities is needed.

There are only a few trails in the nation long enough for more than one or two days of riding. The longest, the 300-mile Wisconsin Bicycle Trail, points to the success of cross-country trails. The Elroy-Sparta section of the trail served 38,000 bicyclists in the summer of 1973. Many riders came from as far away as 250 miles.

Cross-Country Bicycle Routes

The Trans-American Bicycle Trail is to use a "routing" (shared roadway) as opposed to a "trail" (separate facility) emphasis. This has the advantage of extreme low cost (signing and some needed road improvement) and minimal additional maintenance. More importantly, it allows the bicyclist to travel in a natural environment with a much wider riding surface than is possible on a separate trail. This is especially important in hilly or mountainous terrain where additional space is needed for climbs and descents.

Also, on long distance trips, the bicyclist is in need of many services. Stores, cafes, and service stations, all to be found on the nation's abundant backroads, are ready to serve the rider. A carefully researched route will meet most of

By Dan Burden, Director
Bikecentennial '76

these immediate needs.

An added point is that emphasis on trails alone in time will isolate the new bicyclist from mixed traffic, limiting his learning experience. Since a bicycle route is a shared roadway, the bicyclist learns the need for road courtesy and safe riding habits. The bicycle traveler, once confident of his riding ability, in time will want to seek out his own independent routes.

Accommodations, Other Services Needed

Cross-country routes and trails may need additional facilities to be useful. Campgrounds, hostels, and other low-cost overnight accommodations should be planned. Campgrounds especially are a problem for the cross-country bicyclist. Existing campgrounds are often too luxurious and too costly for the simple needs of the bicyclist. Sewage hookups, electricity, parking spaces, and other costly services are of no use to the rider. Even more troubling, many times, the bicyclist arrives too late to get a space. Unlike the motorist, he cannot ride another 20–60 miles to the next facility. Also, the bicyclist is much more vulnerable to campground thefts.

Thus, it is recommended that existing campgrounds on a proposed route offer a special area and rate for the bicycle traveler, perhaps with a chain link fence enclosure in the center of the campground in which bicycles and other equipment can be stored. Of even greater service, bicycle and equipment coin lockers could be offered. This facility should be planned to accommodate all anticipated bicycle traffic. New campgrounds should be added along the route so that a facility is available every 25–50 miles.

Youth hostels and other low-cost lodging should also be planned every 25–50 miles. Existing underutilized buildings can often be renovated for seasonal youth hostel use. In some cases schools, community halls, and other public buildings can be made available for summer use. If a new building is considered, it could be designed as a multiple-purpose building, to be used as a day care center in the day, outdoor education center, or community hall other months of the year.

Guidebooks Essential

Since many bicyclists may be coming from other regions of the nation, or foreign nations, and may be new to long distance touring, guidebooks are needed. Guidebooks for the Trans-America Bicycle Trail will be available by region, with a daily "trip tic" approach. Information on the map-guide will include:

(1) Detailed map
(2) Terrain
(3) Campgrounds, hostels, other overnights
(4) Post office, bike shop, store locations

Bikecentennial route map.

(5) Hospitals, police (location and phone)
(6) Climate, road conditions, accurate distances
(7) Suggested side loop trails

Trail Development Guidelines

The Trans-America Bicycle Trail makes use of lightly travelled roadways over 90 percent of the route. Approximately 400 miles of the trail, however, are on State primary routes carrying moderate traffic. In these sections, it is proposed that a paved shoulder be provided for "Bicycles or Emergency Stopping Only". Since debris accumulates on such lanes, regular sweeping and maintenance are necessary to keep riders from entering the normal traffic lane.

Among the guidelines used to plan the Trans-America Bicycle Trail, and applicable to most cross-country route planning are:

(1) *Near Centers of Great Population.* The trail should be near centers of population or easily accessible from them. Ideally a recreational trail should be located near centers of great population density to encourage maximum utilization and provide needed facilities. However, to locate in an urbanized environment for long distances defeats one of the prime purposes of the trail. Another solution is to make sure the trail is readily accessible to urban dwellers through other transportation systems or connecting trails. The trail should have access points located on mass transit systems.

(2) *Incorporate Existing Facilities.* The route should incorporate already existing bike trails and related facilities. These facilities would help to strengthen and in turn be strengthened by incorporation into the national trail.

(3) *Follow Corridors of Attraction.* The trail should follow "corridors of attraction" and offer inspiring scenery, points of cultural and historic interest and a good variety of land features. It should connect or transect areas of good recreational potential. These are areas conducive to other recreational activities which people traveling by bicycle may enjoy in leisure hours not spent cycling; i.e., swimming, fishing, boating, hiking, backpacking, horseback riding, sailing, etc.

(4) *Availability of Overnight Accommodations.* The availability of overnight accommodations is of prime consideration in determining the route. Approximately every 40 to 60 miles, a low-cost accommodation should be sought. Development of youth hostels and campgrounds should be considered. This particular distance between facilities allows both moderate and long-distance options for travel in one day. Many cyclists enjoy riding over one hundred miles in a day and could easily skip every other facility. Others who prefer a more leisurely pace should find the 50-mile distance appropriate.

(5) *Varied and Interesting Geography.* The general geography will be another factor of highest consideration in determining the trail. Geography should be varied and interesting. It should be representational of the entire area and should include spectacular landforms: Canyons, rivers, plains, hills, gorges, plateaus, mountains, ridges, rims, etc. The roads need not necessarily avoid hills and mountains which many think make cycling more difficult, but should find roads and grades most suitable for enjoyable bicycling.

(6) *Variety in Folkways and Rural Byways.* The trail should also include the opportunity for a close look into some of the great variety in folkways existent on the rural byways. It should encompass and explore the great richness of regional cultural differences to be found within the state or region, customs, realities, and life styles of people isolated from mainstream America.

(7) *Continuous Attraction.* The trail must be as continuously attractive as possible. This consideration cannot be overstressed. For a trail to be viable, it must travel along corridors of attraction, and they must be continuous. If the trail simply connects islands of attraction with long, monotonous stretches between, it will be much less appealing. Many who suggest spectacular areas for the trail neglect to consider the surrounding geography.

The author addresses a Bikecentennial '76 ceremony

(8) *Direct Route.* The trail must be kept as direct as possible and still include all the above considerations. If the trail becomes too long, many will be discouraged from riding.

Benefit and Need

Bicycle Touring is largely an activity of the young. Five or six years ago backpacking was in the same status. But backpacking grew up, and now attracts over 10 million participants, with the number growing 25 percent each year. This growth extends to all age groups, including many families.

And so, too, such rapid growth in both numbers and age range can be expected with bicycle touring. Although the Bicycle Institute of America estimates there are now 100 million bicyclists, those using their 2-wheeled machines for weekend or other long distance travel are few in number . . . probably under 100,000. Offering cross-country facilities and services, however, may gain the same growth as has been enjoyed by backpacking. All age groups, and especially families, can benefit through bicycle travel.

But why emphasize bicycle touring today? First, it provides several important answers to current needs. For instance, the Citizen's Advisory Committee on Environmental Quality points out, "The Committee has long been concerned that the Bicentennial celebrations will foster increased traffic congestion, pollution, and overcrowding in many areas of the country. The bicycle—as a nonpolluting, energy-efficient mode of transportation—and the BIKECENTENNIAL route will be a means of encouraging travelers to leave their cars at home and absorb America's natural and man-made environment through relaxing pedal power. Seeing the country can be more than just whizzing by on a crowded highway enclosed in a glass and steel box. . . . Bikecentennial '76 affords us an opportunity to meet today's needs with the imagination and determination of our revolutionary heritage."

Secretary of Transportation Claude S. Brinegar points out yet another current need: "We are very enthusiastic about the concept of a transcontinental bikeway as a Bicentennial project and feel that this project would provide a unique opportunity for foreign visitors and Americans to meet and travel in

many quiet and beautiful areas of the country. From the many letters and news clips that we receive, particularly during the summer, there is a demonstrated interest in and need for safe routes for long distance recreational bicycle travel. Experienced bicyclists favor the use of existing secondary roads for this purpose. Bikecentennial '76 promises to provide bicycle travelers with a unique opportunity to visit across our nation on a safe and carefully planned route away from major highways."

Additional needs are pointed out by the Bicentennial Administration: "Bikecentennial '76, through its efforts to attract foreign participants will promote international goodwill; through the utilization of back roads it will focus on the many cultures, the natural beauty and geographic diversity that has been a part of the growth of the nation; and through its emphasis on providing low-cost lodging for the participant, Bikecentennial will also advance our goal of providing Americans and international visitors with a comprehensive national network of inexpensive accommodations. All these efforts will bring us closer to making the Bicentennial a meaningful event for all Americans and will provide a legacy of the 200th anniversary celebration."

Research and work with Bikecentennial have pointed out that a single cross-continent route is only a small beginning to meet actual trail needs. A complete system should be launched, serving each region of the nation. The system should include popular routes cross-continent, along the east and west coasts, along the Appalachians, along the Mississippi Valley, and through the great national parks of the rockies. Once this backbone system is launched, shorter cross-state trails, and popular loop trails of 200–800 miles in length should be considered. In 5 to 10 years' time the United States can be well on the way to the finest bicycle trails system in the world. And with it would go extensive chains of campgrounds and youth hostels to serve all outdoor recreation needs.

Carol P. Stewart, a young woman anticipating Bikecentennial, summed it up this way, "I feel that this event should show our country and ourselves that bicycling is a viable thing, that being haste oriented causes one to miss many valuable experiences and feelings. We do not give ourselves a chance to see and feel; we are too much in a hurry to get there, neglecting the getting. If for only a short while, it is time to slow down and feel the countryside, to smell fresh, clean air, to get washed up by a driving rain, and to roast in a blazing sun. It is time to rediscover our country, to learn again to respect the land and the lives it supports. But to respect something, one must know it, and knowledge is usually obtained by experience. I'd like to feel this country of ours and to help others feel it too. To me Bikecentennial '76 means a rebirth in the awareness of the goodness of our land and the lessons this land can teach me."

Mrs. Jim Kehew leads her husband in the final link of their cross-country cycle ride from the west coast to Bicentennial Headquarters, Washington, D.C.

Dan Burden looks on as John Warner of American Revolution Bicentennial Administration congratulates cross-country cyclists Jim and Es Kehew and Jim and Linda Richardson (Left to right).

Planning for Bikeways

By James J. Berryhill
Southeast Region
Bureau of Outdoor Recreation

Bikeways are those special facilities provided to encourage the use of the bicycle, insure greater safety, and enhance the riding experience. In general, they consist of directional markers, lanes, or special roadways for cyclists and support facilities.

Today there is new interest in the bicycle. Its low energy, low cost, and high efficiency have caused many adults to reconsider the earlier choice to abandon the use of the bicycle as an everyday vehicle for transportation and recreation. Recent surveys in Tennessee and Georgia indicate that 41 to 43 percent of all households have at least one bicycle. With the increase in the American people's interest in bicycling must come support in the form of well-designed bikeway facilities.

Author Berryhill lines up for cycle competition.

Classification

Bikeway Classification—While there does not, at present, exist a uniform system of bikeway facility classification, a pattern of common terms has developed as experience in the planning of these facilities has grown. The following classes are the most often used pattern of designation. They reflect the excellent State standards produced by Oregon, California, Georgia, and other States.

Class I (Bike Path)—A separate trail or roadway for the exclusive use of bicycles. Pedestrian and motorist crossflow is minimized. Competition with the automobile is reduced to a minimum or eliminated entirely.

Highly desirable for recreation and sightseeing, particularly in open space and parkland areas and along abandoned rights-of-way, bike paths are expensive, in some cases similar to conventional roadways in cost. Land for bike paths may prove difficult, if not impossible, to acquire and problems arise whenever the bike path's right-of-way crosses that of other transportation modes. Because of narrow bikeway widths, maintenance and upkeep may prove difficult and security in remote areas can prove a problem in some instances.

Class II (Bike Lane)—A restricted right-of-way, designed for the exclusive or semiexclusive use of bicycles. Through traffic of other sorts is not permitted.

The most common form of a Class II bikeway is a bicycle lane at the edge of the road. The lane may be set off by white lines, stenciled pavement signs, *and posted signs to alert the motorist* of the existence of the bike lane. In some instances raised traffic barriers may be used to separate the bike lane from motor vehicle lanes. Placement of bike lanes on streets with parking allowed generally introduces an additional element of danger from suddenly opening car doors.

Less expensive than the Class I facility, the bike lane generally offers less safety from accidents and more exposure to high levels of air pollution. Objections may be voiced by local residents if on-street parking is restricted to provide for proper width of both motor vehicle and bike lanes.

Bike lanes find their greatest usefulness in intraurban areas where they primarily benefit commuters.

Bikers test the new velodrome at East Point, Ga., part of the Atlanta metropolitan area's growing cycling opportunities.

However, as auto speed is lower in these areas, the additional cost of separate bike lanes may not be justifiable in terms of added safety. Correct estimation of potential user rates is critical in making this decision.

Class III (Shared Roadway)—A bikeway designated only by posted signs and having the right-of-way shared by bicyclists and other modes of transportation. Signing serves only to alert the motorist to the potential presence of the bicycle and to provide route direction.

The shared roadway route in the United States dates from a system developed in Homestead, Fla., in the early 1960's. Conceivably, they can serve to channel bicycle traffic onto less frequented streets. Depending upon the skill of the route selection, this may mean a less frustrating, safer ride with less pollution or simply a tedious, time consuming diversion. In general, Class III bikeways are most suitable for quiet, residential areas.

Cost figures for a given bikeway are strongly influenced by local conditions, requirements, and the time of the year in which the project is constructed. Generally, Class I projects will be most expensive with a typical cost of $20,000 to $30,000 a mile. Class II generally is much less expensive, ranging from $2,000 to $3,000 per mile. Class III, depending on the type (reflective or nonreflective) of signs used and their frequency, will be from $500 to $1,000 per mile.

Selection of which form of bikeway to install will have to be a combination of local needs, economics, and political feasibility. The alternative of improving existing roadways by the removal of hazards such as sewer gratings and other obstructions should not be overlooked. In any event, provision of a bikeway facility should not be allowed to become the rationale for the restriction of bicycles from other roadways.

Planning is the key to the utilization of the potential for bikeways. The need for a bikeway must be clearly documented with traffic counts, surveys of bicyclists, interviews with residents and merchants in areas of potential effect. The class and design specifications must be selected carefully to match with the local terrain considerations and opportunities to use the existing street network. Potential for adequate maintenance should also be another planning factor.

Design Criteria—During the planning of a bikeway, a number of questions must be answered concerning the design criteria to be followed. How wide should a bike lane or path be? What percent grade is acceptable? How great a traffic volume can be tolerated before separation is necessary? These and other questions must be thoroughly examined or the bikeway will become an expensive "white elephant." It's obvious that not everyone involved in bikeway planning can be a highway engineer, but everyone involved in the planning of bikeways should have a working knowledge of the factors involved.

What average speed should be designed for? A higher design speed calls for gentler curves, greater braking distances before intersections, and wider maneuvering spaces. While cyclists are often clocked at over 30 mph on city streets (and the world speed record for bicycles is 138 mph), the average cyclist's speed on the public roads is closer to 10 or 11 mph. A

conservative design speed used on many campus areas in the United States is 10 miles per hour. European countries generally design for slightly higher speeds, and the USSR uses 15 mph for its design speed.

Terrain features must be given more attention in the design of a bikeway than they would in designing a conventional multi-modal roadway. Not only must the actual percent of slope be considered but also the length of the slope and its relationship to other terrain features. Frequent short up-hill areas can be as punishing on the cyclist as longer steeper grades. Additionally, the type of bicycle traffic, as indicated in the initial potential user survey, must be considered in determining acceptable grades. Traffic consisting largely of 5 and 10 speed bikes with younger riders can be much more forgiving of steep slopes than traffic consisting of single and three speed bicycles. Planning near retirement communities, of course, presents special problems. In general, anything over a 5 percent grade over any distance should be avoided and where impossible to avoid, warning signs should be posted.

Width: The question of bikeway width is a particularly difficult one. There are at present no national standards pertaining to width in the United States. European standards, such as the West German, are based on the actual rider dimensions. Thus the German standards, similar to many other nations having bikeways, allow a minimum of 1.96 feet width for actual cyclist space, plus 0.66 foot maneuvering space on either side and a further 0.82 foot clearance for obstructions such as fences or sign posts to the side. The UCLA researched Bikeway Planning Criteria & Guidelines suggests that widths resulting from this standard may be too narrow and recommends a more liberal 6.4 feet for two lanes, 10.9 for three, and 15.3 for four lanes. Some additional width considerations are: danger of dynamic objects (e.g. opening car doors), fast or heavy traffic and, in the case of Class I facilities, the size of construction and maintenance vehicles. Pavement laying machines usually operate on an 8- to 12-foot standard. Therefore, widths below this would have to be done by hand labor with the resulting cost being equal, or nearly so, to that of the wider machine-laid surface. Sufficient overhead clearance must be allowed for branches, underpasses, and signs. In general, an overhead clearance of 8.0 feet appears adequate with 12.0 feet being more suitable for confined areas such as underpasses. Some side clearance should be allowed for curb dropoffs, raised curbs, sloped dropoffs, soft shoulders, signs, fences, greenery, and utility poles. The purpose of this side clearance is as much psychological as it is physical. The German standard of 0.82 foot appears reasonable to relieve feelings of "crowding."

Curves: Radius of curvature (the radius of the circle having the same curvature as the road curve being considered) is a measure of the relative tightness of the turn. The larger the radius of curvature, the gentler the curve. This should be consistent with the design speed selected, especially in the case of Class I facilities whose curves are normally independent of design constraints related to existing facilities. The UCLA Institute of Transportation and Traffic Engineering has experimentally determined the unbraked radius of curvature (R, in feet) to equal 1.25 times the velocity (V, in miles per hour) plus 1.4.

Surfacing: Once the route and design of the bikeway have been determined, then the base and surfacing must be selected. Proper choice of materials is of extreme importance since the typical bicycle lacks suspension, and any poor road conditions are transmitted as road shock directly to the bicyclist. Failure to provide an adequate surface can lead to the bicyclist rejecting your scenic facility in favor of the nearest easy-to-ride street. There are several types of potentially acceptable surfacings, and the final choice must be made on the basis of climate and cost. The ordinary asphalt cement, for instance, is a strong, waterproof, durable surface which is resistant to most acids, alkalies, and salts. While suitable for a number of different climatic areas, this surfacing has recently experienced a sharp increase in price as a result of the shortage of petroleum and petroleum-related products. This, coupled with the present high cost of the hand labor necessary to place this material, may make other types more desirable. Seeking the advice of a reputable local paving contractor is usually a valid step as he will be familiar with local conditions and prices. Experience in the installation of golf cart roads will help qualify a contractor to be knowledgeable on possibilities for bikeway construction.

Clearing: Clearing of vegetation along the right-of-way is an important consideration in planning for use of the bikeway. Class I bikeways often run along stream valley bottoms, along abandoned railroad rights-of-way, or other inaccessible areas. Because of their isolation from direct observation, they present the possibility of the occurrence of high crime rates. Clearance of all vegetation large enough to conceal a person should be done during the construction phase, and the clearance area should ideally be at least 10 feet from either edge of the paved right-of-way. Of course, low decorative plantings can be used in the cleared area to provide visual interest.

Lighting: Lighting of Class I bikeways and isolated areas of Class II is also necessary to keep crime to a minimum. Because of the inefficient nature of typical bicycle lights, area lighting is necessary both to deter crime and illuminate the bikeway sufficiently for safe passing of bicyclists. Light levels need not be extreme; 1½- to 3-foot candles should be sufficient. Again consultation with a local lighting contractor can save the planner

Class I Bike Trails offer safe cycling but require careful design and maintenance.

Class II Bike Lanes provide traffic separation, except at intersections.

Class III Shared Roadway routes are the least expensive.

much wasted effort. The contractor will be familiar with local codes and requirements as well as knowing the types of equipment available and the costs for providing various levels of illumination.

Support Facilities

Support facilities consist of those non-roadway elements provided to make the bicycling experience more enjoyable. These include: Stopping or rest areas; security devices such as racks; rain shelters; roadside information markers; and comfort stations.

Rest Stops: While the hardier of the bicyclists is probably capable of riding close to 100 miles with no stops for rest, the average user of a bikeway facility is more likely to appreciate a stopping place every few miles. These stopping places are quite similar to roadside parks for automobile tourists. Basically such a facility will consist of a circular drive or large enough paved area to permit the bicyclist to pull off the bikeway easily and a place to sit down and rest. Depending upon the climate, there may be a need for a covering to provide shade and provision for a water fountain. A well designed stopping place can provide a pleasant experience which will augment the enjoyment of the use of the bikeway facility. Few, if any, stopping points are required on bikeways intended primarily for use by commuters; but facilities for long distance bikeways will require provisions for overnight stopping. Hostels similar to those of Europe and the New England area of the United States will encourage long distance touring and help to reduce energy expenditures for recreation.

Security: Security from theft is a prime concern of today's bicyclist. A quality bicycle can easily cost in excess of $300 and shortages in supply have made it easy to dispose of stolen bicycles. Some form of security device should be provided wherever a bikeway's user is likely to stop or rest. In general, lockable bicycle racks should be used at rest areas and where bicyclists are likely to be away from their bicycles for relatively brief periods. Racks used in these circumstances should be located in as exposed a position as possible. This exposure will limit theft by making the criminal activity more obvious. If the bicyclist will be stopping for a more extended period, such as a stop at a transit station or a shopping center, then a more secure provision must be made for leaving his bicycle.

Bicycle lockers are commercially available or may be easily fabricated. These provide the ultimate in security as well as providing protection from the elements. Generally,

bicyclists will gladly pay a small sum for the use of these lockers, providing needed capital for maintenance and improvements to the system. Again, a fairly obvious location is best for the bicycle lockers to prevent attempts at theft, particularly if coin operated locks are employed on the lockers. Fortunately, the bicycle locker may readily be incorporated into normal street furniture design patterns such as planters, seating areas and kiosks. Whichever pattern of security device is used, the area must be lighted for full use and adequate parking space should be provided. The bikeway planner should be especially alert for feedback from the bicyclists concerning the desired number and type of security devices needed.

Shelters: Local climatic conditions will determine the need for rain or sun shelters along the bikeways. If necessary, these are generally incorporated into the regular rest areas and may feature such elements as picnic tables, grills, water fountains, and the like. There are a number of suitable commercial designs, and prefabricated units available from commercial sources; plans for shelters can be obtained free from the U.S. Department of Agriculture's Extension Service. Another use for covered shelters is at transit pickup points. One feature of such shelters would be the availability of bicycle lockers for those bicyclists not wishing to take their bikes with them on the transit. Spur routes from existing recreational routings, featuring covered waiting areas and secure locker parking, can greatly increase the utility of a bikeway project and add transportational value to the system.

Information Markers: The bicyclist is more aware of his surroundings than the motorist. Because of this, the bicyclist is more likely to appreciate roadside informational markers. Historical interest points, natural features, nearby features of interest such as shopping areas, recreational features, other bikeway facilities, and the like, are all suitable for the use of informational markers. Information on route markers should be limited to a few words each but much more lengthy markers may be employed at stopping points and rest areas. If transit oriented facilities are provided, most transit companies are happy to cooperate in providing route and schedule information to be displayed at the pickup point.

Comfort Stations: One of those often-overlooked but necessary support facilities for bikeway systems is the comfort station. Facilities of this type can be easily incorporated into the design of covered shelters; prefabricated units are available which have both a covered shelter and comfort stations. While it is not necessary to provide these facilities at each rest point, signs should be provided at each rest point indicating the location of the next comfort station stop as well as other major features of the bikeway system. A related feature of the system should be the provision for machine sales of canned drinks. Ideally, the selection in the machines should include canned iced tea and salt replacement drinks as well as the usual soft drinks. This simple addition to the system will make the riding experience pleasant as well as provide welcome revenue to help with maintenance costs of the system.

Funding

Planning, developing and maintaining a really useful bikeway system requires some fairly large amounts of money. Of course, it is possible and desirable to motivate community support to the point that no outside money is needed; and while systems have been built on this basis, it is rare. More normally, support is sought from State and Federal sources. Fortunately, there are several Federal agencies offering assistance as well as a few States.

States: The landmark bill for State assistance to bikeways is the Oregon House Bill 1700 which provides for the mandatory expenditure of 1 percent of the State's highway funds for bicycle routes and footpaths each year. Using this seemingly small amount of money, the State of Oregon has made considerable progress in the development of a comprehensive statewide bikeway system. Other States such as California and Illinois have followed the lead of Oregon, and similar bills have been proposed or are under consideration in a number of other States.

Department of the Interior: The Interior Department is empowered by the Land and Water Conservation Fund Act of 1965 to provide matching fund assistance to States and local units of government for the acquisition and development of outdoor recreational resources. Handling of these outdoor recreation projects is through the Bureau of Outdoor Recreation which has seven regional offices throughout the United States.

While many forms of recreation are funded; e.g. swimming pools, hiking trails, and tennis courts, bikeways are a currently popular project due to their ability to encourage low energy recreation and provide for close-to-home recreational opportunities. This is not to say that projects for funds from the Bureau of Outdoor Recreation are not competitive; they are, but a bikeway request does stand an excellent chance in the competition. Actual approval of the project is through a State-appointed liaison officer who forwards the requests for funds to the regional office and works closely with Federal project officers in deciding which projects shall be financed by the Land and Water Conservation Fund. Each State is required to have a statewide comprehensive outdoor recreation plan which sets forth the outdoor recreation needs of the State and recommends priority actions for meeting those needs. Any bikeway proposal submitted must be in accordance with this plan. Funds are available to public agencies on a 50–50 matching basis. Grants in the past for bikeways have ranged from $750 to $425,000; the Bureau has funded citywide recreational bike systems as well as single bike paths.

Department of Transportation: A major source of potential financial assistance is the Federal Highway Administration (FHWA). Bikeway funds are available either as part of larger project planning and construction or as separate funds taken from the Highway Trust Fund under provisions of the Federal Aid Highway Act of 1973. Under the provisions of the 1973 Act (Public Law 93-87) funding is authorized up to a limit of $2 million per State or $40 million total, per fiscal year. For bicycle facilities constructed as incidental features of Interstate projects, DOT finances 90 percent of the cost. These 90 percent Interstate funds may not be used for independent bikeway projects, but such facilities on the Interstate System can be developed with 70 percent primary or urban Federal-aid funds. For bicycle facilities constructed as incidental features of Federal-aid primary, secondary, or urban highway projects, or as independent bikeway projects, the matching ratio is 70 percent Federal and 30 percent State or local. An important point to remember in dealing with these funds is that the bikeways are competitive with other highway projects for funds. Thus getting a bikeway may well mean giving up some other project such as road surfacing. Requests for use of the Federal highway funds for bikeway projects, including planning of bikeways, should be coordinated through the State highway agency, which must approve the project.

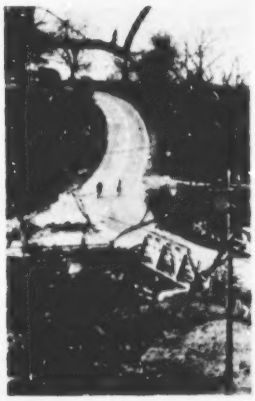
Department of Commerce: Some bikeway development funds are available through the Public Works Impact Program under the auspices of the Economic Development Administration, Department of Commerce. The program is restricted to areas of high unemployment, currently where it is about 8½ percent or more, and is intended to lower the unemployment rate while creating something of public benefit, e.g. parks, sewers, or bikeways. Bikeways have been built using these funds in eligible areas designated by the Regional Economic Development Administration Office based on current employment statistics. Application should be through either a designated area representative or the regional office.

Department of Agriculture: The Farmers Home Administration, U.S. Department of Agriculture, is authorized to make loans to develop community facilities for public use in rural areas and towns of up to 10,000 people. The maximum term on all loans under this program is 40 years; but in order to be eligible, the community must be unable to obtain needed funds from other sources at reasonable rates and terms. An interesting feature of the program provides that the Farmers Home Administration will assist the applicant in making the first determinations regarding engineering feasibility, economic soundness, cost estimates, organization, financing, and management matters in connection with the proposed project. While not specifically naming bikeways in the legislation, the act does provide for the use of funds for "community facilities that provide essential service to rural residents." Loan applications are made through the local county offices of the Farmers Home Administration.

Department of Defense: The Department of Defense, Department of the Army, has occasionally cooperated with local officials to construct a bikeway link on government land. The Golden Gate Bikeway in California is an outstanding example of this type of cooperation. In other cases engineering units of the U.S. Army Reserve, as part of their construction training, have become involved in bikeway construction as civic improvement projects.

Environmental Protection Agency: The Environmental Protection Agency has required that some high air pollution count cities prepare action plans, including bikeways, to reduce automobile usage. No financial assistance, however, is provided toward the design or construction costs.

Class I Bike Trails are highly desirable for recreation and sightseeing.



Federal Highway Bicycling Programs

The Department of Transportation is vitally concerned and involved with bicycle programs, concentrating on commuter transportation aspects. The Department recognizes the importance of bicycling in its responsibility to develop "policies and programs conducive to the provision of fast, safe, efficient, and convenient transportation at the lowest cost consistent therewith and with other national objectives, including the efficient utilization and conservation of the Nation's resources.

—**"Bicycling for Everyone,"**
U.S. Department of Transportation

By Janice Graubard
Associate Editor

New Bicycle Facility Funding Under the Federal-Aid Highway Program

The U.S. Department of Transportation provides States, through its Federal Highway Administration (FHWA), with Highway Trust Fund moneys for construction and improvement of roads included in Federal-aid highway systems. The FHWA encourages the construction of bicycle and pedestrian facilities as part of the regular Federal-aid highway program. The construction of these facilities may be approved where all of the following conditions are satisfied:

1. The facility will not impair the safety of the pedestrian, bicyclist, or motorist.

2. The facility will connect with existing facilities usable by bicyclists or it will form a segment of a proposed bicycle system.

3. A public agency has formally agreed to:

a. Operate and maintain the facility.

b. Ban all motorized vehicles except maintenance vehicles and snowmobiles when snow conditions and State or local regulations permit.

4. It is reasonably expected that the facility will have sufficient use in relation to cost to justify its construction and maintenance.

Bicycle and pedestrian facilities may be constructed as incidental features of highway projects when concurrent with the improvement for motor vehicular traffic. The bikeway or walkway must be within the normal right-of-way of the highway including land acquired for traffic improvements and scenic enhancement programs.

Bicycle and pedestrian facilities may also be built independently, either on existing highway rights-of-way or on separate rights-of-way or easements acquired for this purpose. Where facilities are to be located away from Federal-aid highway rights-of-way, they must serve bicycle and pedestrian traffic which would normally use the Federal-aid highway route. The limit of the Federal-aid share of independent bicycle and pedestrian project cost is approximately 70 percent. A State may spend up to $2 million of Federal-aid funds in a year for inde-

pendent bicycle and pedestrian facilities, provided a nationwide total of $40 million annually is not exceeded.

It should be emphasized here that the Federal-Aid Highway Act of 1973 did not create a separate fund but rather gave the States the right to use a portion of their regular yearly appropriation for independent bicycle and pedestrian facilities.

To date, under the Federal-Aid Highway Act of 1973, at least 24 States and the District of Columbia have allocated a total of more than $25.5 million for independent bike and walkway projects. The States of California, Connecticut, Florida, Maryland, New Jersey, New York, and Pennsylvania have been allocated their maximum $2 million.

Projects incidental to larger highway construction projects may be financed with the same type of Federal-aid funds used for the basic highway project, including Interstate projects. They are not subject to the funding limitations applying to independent bikeway or walkway projects.

Features of Bicycle and Pedestrian Facilities

Bicycle and Pedestrian facilities may include various features which will make their use safe, enjoyable, convenient, and efficient. Following are some features which may be financed with Federal-aid highway funds.

1. Grading, drainage, paving, barriers, landscaping, and structures necessary to accommodate the number and type of users of the facility.

2. Fixed source lighting where its use is appropriate.

3. Right-of-way (land acquisition and relocation assistance) on independent bikeway and walkway construction projects.

4. Curb-cut ramps on existing facilities, including ramps required for access by the physically handicapped.

5. Bikeway and walkway grade separations where:

a. Vehicular speeds and crossing volumes constitute a hazard of such magnitude as to justify the cost of the structure and the bikeway or walkway cannot be rerouted to another structure; or

b. The separation is necessary because the highway has complete control of access.

6. Traffic control devices including signs, signals, and pavement markings.

7. Supplementary features such as shelters, parking, storage facilities, and comfort stations.

8. Walks, barriers, and additional widths and lengths on bridges necessary for bikeways and pedestrian walkways for route continuity.

Planning and Research Projects

Planning and research activities necessary for development of bicycle facilities may be financed with Highway Planning and Research Funds and Planning Funds. The limit of the Federal-aid share of planning and research project costs is approximately 80 percent.

HP&R projects may be located anywhere in the State and are selected by the State transportation agency. PL funds are to be used for planning projects located in urbanized areas of 50,000 or greater population. The metropolitan planning organization responsible for transportation planning in the urbanized area selects the projects to be financed with PL funds.

Obtaining Federal Aid

The important initial step in obtaining Federal aid for bicycle and pedestrian facilities is gaining the support of local governments for the proposed facility. Local governments play a valuable role in highway programs. Their contributions vary from location and design suggestions to the selection of specific projects to be financed with Federal-aid highway funds.

Related Use of Land and Water Conservation Funds

The availability of highway funds for independent bikeways and pedestrian projects greatly expanded the potential for establishing trail systems in and around urban areas. The project sponsor is encouraged to use other funding sources to develop recreational bikeways which may be in conjunction with Federal-aid highway assisted bikeway projects. The Bureau of Outdoor Recreation, which administers the Land and Water Conservation Fund program, encourages the use of the Fund for acquisition and construction of recreation trails and routes in areas where the need exists. Funds may be used for project planning when included as a part of a developed project, for structures and features, including certain supplementary facilities basic to a recreational bicycle path or trail, and for right-of-way acquisition. Up to 50 percent matching assistance is available to States and their political subdivisions.

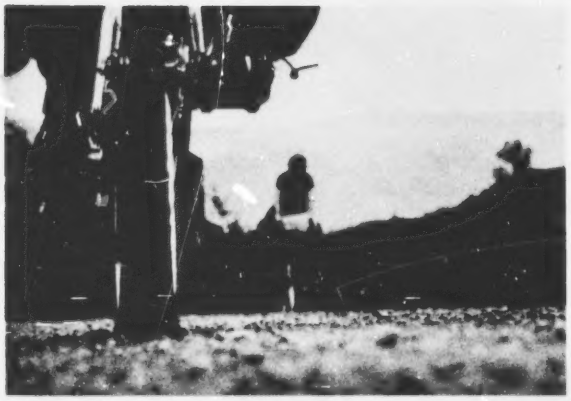
Projects must be in accord with the statewide comprehensive outdoor recreation plan. Under the National Trails System Act of 1968, the Bureau encourages States to consider trails in the preparation of their outdoor recreation plans. Prior to applying for L&WCF assistance for trails, States must consider the needs and opportunities for establishing bicycle and other trails in or near urban areas.

Because of the availability of Federal-aid highway funds for bikeway projects associated with Federal-aid highways, the Bureau strongly encourages communities to seek such funding as an alternative to the use of Land and Water Conservation funds along such routes. The agency responsible for administering the Land and Water Conservation Fund in each State should be contacted for application forms and further information.

Safety and Locational Criteria Study

The Federal Highway Administration has awarded a contract to DeLeuw, Cather and Company of San Francisco to develop safety and locational criteria for bicycle facilities. This 2-year effort begun in July 1973 has the following objectives:

1. Develop strategies which provide for the safe movement of bicycles, motor vehicles, and pedestrians on shared facilities, and for their safe movement through points



of mutual conflict, such as intersections.

2. Determine criteria for locating bicycle routes. A reliable method of predicting future use is to be included.

Already, a review of existing physical facility provisions has resulted in a State-of-the-Art Report, available from Office of Research, Federal Highway Administration.

Results of the research will be documented in a final report and a 2-volume user manual. Volume 1 will outline design treatment guidelines, safety standards, and physical specifications for bicycle facilities. Volume 2 will present methods for predictive forecasting and cost effectiveness assessment, data base, assembly techniques, and locational criteria, plus procedures for their application. All reports are to be available during 1975.

Contact: Office of Research, Federal Highway Administration, HRS – 41, Washington, D.C. 20590.

Establishing a Bicycle Safety Standard

The National Highway Traffic Safety Administration, in cooperation with State, local and Federal agencies, private organizations and individuals, has begun the formal process leading ultimately to Congressional legislation authorizing a bicyclist safety standard. It should be noted that bicycle safety, in terms of the mechanics of the bicycle itself, falls within the jurisdiction of the Consumer Product Safety Commission; jurisdiction over bicycle lanes and paths, as well as traffic control, rests with the Federal Highway Administration.

The States and their subdivisions will ultimately have the responsibility to carry out the standard. NHTSA is conducting a series of studies to review the status of State and local laws and enforcement capabilities and to assess their financial capacity to develop bicyclist safety programs.

As a result of communications and research over the past months, the NHTSA has developed an outline of bicyclist safety issues, as follows:

1. Relationship to other standards—the need to coordinate with related standards such as pedestrian and motor driven cycle standards.

2. Legislation—dealing with the diversity of jurisdictions.

3. Law enforcement—dealing with bicyclist traffic violations.

4. Education—measures needed for effective improvement.

5. Traffic records—need for comprehensive bicycle accident reporting.

6. National requirements and local requirements—distinguishing between requirements of national significance and those which should remain flexible to meet local need.

A bicycling safety file is being established in the NHTSA Technical reference library to serve as a collection point for relevant material. The library is located in room 5108, 400 Seventh Street, S.W., Washington, D.C. 20590. A bibliography of recent materials is also available for review.

Scenic Highway Study

The FHWA feasibility report issued September 25, 1974, on the development of a National Scenic Highway System identifies five major issues regarding scenic highways: National designation; corridor protection and scenic enhancement; complementary facilities; urban emphasis and energy efficiency; and national connectivity. The report recommends that Congress consider legislation to provide for the designation of high quality scenic highways, emphasizing routes near urban areas; and to approve the use of Federal-aid highway funds for acquiring, restoring, preserving, and enhancing scenic resources on or adjacent to designated scenic highways, "including limited development of publicly owned and controlled rest and recreation facilities." The report recommends a total investment of from $0.8 to $1.8 billion over a period of 10 to 20 years. It does not recommend the creation of a separate fund for a scenic highway program, rather that States be allowed to use a portion of regular Federal-aid highway allocations.

Recreation Access Study

The Department of Transportation and the Department of the Interior are jointly sponsoring a study of access to parks, recreation areas,

historic sites, and nature preserves, highlighting alternatives to use of private automobiles, and emphasizing access for city dwellers.

Environmental problems, possible future energy restrictions, and weekend traffic congestion between recreation sites and metropolitan areas are among the factors that will receive consideration in making policy recommendations.

The approaches that will be used to identify problems of user access and potential alternative solutions are:

1. A national survey of recreation area access problems of major regional significance;

2. A survey in two metropolitan areas to determine the role transportation plays in the use of recreation and park facilities by low-mobility groups; and

3. Selected case studies for six locations outlining specific problems and possibilities for improvement. The six locations are: Como Park, in St. Paul, Minn.; Cape Cod National Seashore, Mass.; Yosemite National Park, Calif.; Lake Sidney Lanier North of Atlanta, Ga.; the Hudson River Corridor, including Bear Mountain State Park, N. Y.; and Indiana Dunes State Park and National Lakeshore, in the Chicago-Gary, Ind., metropolitan area.

The study incorporates ideas solicited from interested groups and private individuals in a report due for transmittal to Congress by January 1, 1975.

For further information contact Office of Environmental Affairs, Department of Transportation, 400 Seventh Street, S.W., Washington, D.C. 20590; telephone (202) 426-4396.

Low Capital Transportation Improvements

Federal Highway Administrator Norbert T. Tiemann recently announced a new low-cost approach to improving the Nation's highways. He said that the Federal Highway Administration will place national emphasis on a Low Capital Transportation Improvements (LCTI) Program. The new concept will fund improvement projects designed to provide maximum use of existing highway transportation systems while requiring little or no additional right-of-way or expenditure of capital resources.

Included will be traffic engineering and safety projects, people-moving efforts such as direct transit improvements, carpooling activities, and bicycle and pedestrian facilities. Also included are specialized strategies such as staggered work hours and 4-day workweeks designed to reduce peak-hour traffic congestion.

Being considered for inclusion in the LCTI program is the provision of separate or preferential bicycle lanes, bicycle traffic control devices, bicycle parking facilities, and pedestrian walkways constructed either in conjunction with or separate from highway improvements.

Urban Bikeway Design Competition

The Department of Transportation recently granted $9,915 to the Urban Bikeway Design Competition to support the competition's judging and awards, and publication of its final report.

Entries to the first Urban Bikeway Design Competition closed July 1, 1974. Organizers report 20 entries from student teams nationwide. Multidisciplinary teams have submitted bikeway demand studies and bikeway plans for sites, mainly in campus communities.

U.S. Secretary of Transportation Claude S. Brinegar announced the grant, and said the competition is spurring the training of student bikeway planners and bikeway traffic engineers, both new disciplines the department is anxious to encourage.

For further information on the competition, contact the Urban Bikeway Design Competition National Headquarters, Building E-40, Room 250, Massachusetts Institute of Technology, Cambridge, Mass. 02139.

Urban Railroad Relocation Report

The Federal Railroad Administration has completed a report entitled "Guidebook for Planning to Alleviate Urban Railroad Problems—Volume III." It presents an analysis of the nature and magnitude of the conflicts between urban railroad facilities and surrounding communities, and develops a methodology enabling communities generally to undertake railroad relocation studies.

The Railroad Administration emphasizes that while abandoned urban rights-of-way may have great potential for bicycle and other trails, recreation projects will have to compete with other potential uses. The community involved will be responsible for determining its highest priority needs, whether for recreation, housing, commercial, or other development. The decision would be based, at least in part, on the highest perceived return, computed on the basis of benefits such as user satisfaction or income from taxation.

The report consists of four volumes:

Volume I	Executive Summary
Volume II	Community Guidebook for Preliminary Assessment
Volume III	The Approach to Planning
Volume IV	Nature and Magnitude

The completed report was scheduled to be available to the public on or shortly after January 1, 1975, through the National Technical Information Service, Springfield, Va. 22151.

Contact: Richard J. Crisafulli, Office of Policy and Planning, Federal Railroad Administration, 400 Seventh St., S.W., Washington, D.C. 20590.

Bike Trip Routing

Bicyclists hope they will someday have a complete network of bikeways for use. However, until a bikeways system is developed, most recreational bike trips must be routed over existing roads. Many agencies, individuals, and bike clubs are drawing on their knowledge and experience to create bike routes which enhance both the pleasure and safety of bikers. Laying out bike routes is not a difficult process so long as the following basic points are considered.

Many cyclists are content simply to ride for the sake of riding. However, in order to interest the average cyclist, a bike route should be built around a theme or basic idea. Common themes are historical or natural,

Pleasant vistas and comfortable riding are good points to consider.

while others may include time-distance events such as bike rallies. Normally an area of travel will have some overriding positive features which act to determine a theme. Once the theme is chosen and points of interest are located, it is only a matter of determining the best connecting routes. For selecting rural routes, 7½-minute topographic maps are excellent base maps, while specific city maps are a better base for urban trips. Geological Survey, U.S. Department of the Interior, Reston, Va. 22092, has topographic maps available on most areas. These may be ordered at low cost.

Once a number of alternative routes have been selected, they should be scouted beforehand by automobile in order to save time. The first consideration should be to determine the location and extent of hazards. Since modern lightweight bikes cannot negotiate gravel road shoulders, ideally there should be at least 10 inches of paving extending beyond the edges of the automobile roadway. This paved strip should be set off from the rest of the road by a white or yellow line.

The road surface must be reasonably smooth and free from chuckholes or stormdrain gratings. Watch out for areas prone to bubbling tar in the summer as they can be dangerously slippery. Blind driveways and overgrown intersections also should be noted. Since it is impossible to eliminate these problems completely, the planner must weigh the negative features of each alternative route and choose the least dangerous.

The recommended direction for a route circuit is determined best by bicycling in both directions in order to discover the most pleasing aspect of the points of interest and the most gradual uphill gradients. Steep grades are much more fun to descend than to ascend, and usually the two sides of a hill or valley will differ significantly in grade.

The bicycle reconnaissance will probably result in a completely new impression of the route. Use of this new information to modify the plan will determine the final route.

It then becomes necessary to draw a map which incorporates the information gathered. The map should indicate a starting point, some easily recognizable landmark such as a bank or supermarket parking lot. Symbols or numbers may be used to indicate points of interest, hazards such as rough pavement, or vicious dogs. Note the location and grade of hills, as well as the location of public toilets, phone booths, etc.

By now the planner should have a good idea of traffic flow patterns and can note on the map any periods of heavy traffic. For example, although Sunday mornings are usually the lightest time of use, a nearby church can result in locally heavy traffic.

Finally, the planner should put together an accompanying fact sheet describing points of interest and explaining the map symbols. The addition of an appropriate route title or name will complete the job.

By Gerard Bentryn
Northeast Region
Bureau of Outdoor Recreation

Bicycle Security—A New Industry

By Julian Rhinehart
Mid-Continent Region
Bureau of Outdoor Recreation

The lightweight 10-speed bicycle has not only changed the bicycle industry, it has created another one—bicycle security.

The new models have become a prime target for thieves. The much-in-demand 10-speed bicycles are found almost everywhere. Since many of the newer models retail for several hundred dollars, the theft of an entire bicycle or its components can net a thief a sizable return for his risk.

Although national and statewide registration programs may eventually reduce the bicycle theft rate, the immediate problem facing bicyclists is "How do I park my bike?"

In some areas this problem became so acute that bicyclists refrained from using their machines because of the loss risk. The rate of bike thefts skyrocketed to the point where victims were hesitant to replace stolen bikes; potential buyers were afraid to invest in a new bicycle.

Since the new bikes are much more valuable, thieves began stealing easily disassembled portions of locked bicycles. As a matter of fact, the stolen bicycle parts market has become so lucrative that thefts are risked just to obtain one wheel. Often a lightweight chain or lock is cracked, and the entire bike taken.

Government officials have realized that in addition to needing places to ride, the tidal wave of new bicyclists also need places to park their bicycles. The importance of bicycle parking has been emphasized when newly constructed bikeways were not fully utilized. The lack of secure parking facilities has discouraged both recreationists and commuters from bike travel.

Carrying a lock and chain does not always solve the biker's protection problems. Adequate parking devices seldom have been available. For many years the standard rack was a metal tube structure which held the bike in an upright position by providing a slot into which the front wheel could be rolled. This was an ideal parking solution for sturdily constructed balloon tire bikes, but when the lightweight 10-speed entered the picture, new problems soon became apparent. A strong gust of wind or a lateral force could easily bend a lightweight front wheel rim which was wedged into the rack. Placing the rear wheel in the slot often damaged the fragile gearing system.

Security devices, usually in the form of locks, chains, and cables now are plentiful on the market. However, supposedly sophisticated protective devices seem to be soon conquered by equally sophisticated theft techniques. As the search for safe bicycle parking continues, new products and new language have entered the scene—bicycle parking systems, bicycle locking stations, bicycle lockers, and coin-operated bicycle racks.

Bicycle security has started to command more attention. Instead of a hastily purchased fixture, planning has begun to precede bike rack installation.

Opinions are being sought from architects, engineers, planners, superintendents, and the most important advisors of all, the bicyclists. Although the bicycle parking industry is still in its infancy, four distinct types of design have evolved for bicycle security devices. The basic bicycle rack enables cyclists, carrying their own lock and chain, an easy way to secure their machines. This type of rack is available in several shapes and designs. More elaborate variations provide chains or cables and/or shackles which cyclists may combine with their own locks to secure their bikes. The more sophisticated versions provide a locking structure with a coin-operated locking device. On some coin units locked bicycles are automatically insured against theft. Locker enclosures are being used to secure bikes in some locations.

In recent years manufacturers have learned that the location of a parking device is equally as important as its design. Incorporating bike parking facilities into a new building's preplanning is most important. Location is not only important because of the convenience factor, but also from a psychological standpoint. Cyclists simply will not leave an expensive bike in an isolated area which is conducive to vandalism or to breakage of the locking mechanism. Poorly placed installations have repeatedly proven that a parking site must look secure before a cyclist will use it.

Purchasers of bicycle parking facilities now have numerous options from which to choose. The industry is still growing and learning, but it is already capable of handling most of the problems with which it is confronted.

For further information contact the Bureau of Outdoor Recreation, Regional Director, Mid-Continent Region, P.O. Box 25387, Denver Federal Center, Denver, Colo. 80225.

A Northeastern Seaboard Bicycle Trail Concept

By Edward M. Hay
Northeast Region
Bureau of Outdoor Recreation

Millions of Americans, Canadians, and Europeans will visit the Northeastern United States in 1976. They will come to see the places and recall the events which were associated with the new nation 200 years ago. Historic sites of interest include:

- Minute Man National Historic Park at Lexington and Concord, Mass.
- The Freedom Trail in Boston
- Federal Hall in New York City
- Independence Hall National Historical Park in Philadelphia
- Valley Forge and Brandywine in Pennsylvania
- Mount Vernon, and Williamsburg in Virginia

People will come to see these places by plane, ship, train and automobile . . . and they will also come by *bicycle*!

Every year more people ride bicycles as a different and more satisfying way to experience countryside, recreation areas, and points of historical interest. A planned coast-to-coast Bikecentennial '76 bikeway will make it possible for bicyclists in 1976 to ride on an identified route and to stay at hostels or other low-cost accommodations in a variety of places all the way across America from Oregon to Virginia. But many more people will want to bring bikes on car racks, airplanes, and trains. Still others will look for ways to bicycle to and from Montreal, the site of the 1976 Olympic Games.

How will people get from place to place by bicycle in the Northeastern States? One answer may be a bicycle trail extending northward from the planned Bikecentennial trail route. This Northeast bike route would complement Bikecentennial in both concept and function.

By July 1975 the Bureau of Outdoor Recreation, through meetings with public and private bicycling interests, plans to map a bicycle route along the Northeastern seaboard from Maine to Virginia so that an individual or group can experience a canoe trip in New England, historical tours in the Middle Atlantic states, or a hike in the Mountains of West Virginia—all connected by bicycle travel.

The bike route would use the existing road system to interconnect points of recreational, historical, and cultural interest. The concept would consider such additional factors as accessibility to and from the many population centers of the Northeastern States, overnight facilities, and the relationship to other kinds of recreation experiences. Connectors to Cape Cod, Long Island, the Erie Barge Canal, and the Chesapeake and Ohio Canal are to be considered along with other possible connecting side trails. Nationally significant recreation areas which might be made accessible through connecting routes include the following:

- Acadia National Park
- The White Mountain and Green Mountain National Forests
- Cape Cod National Seashore
- Fire Island National Seashore
- The Catskills, Pocono, and Adirondack Mountains
- The Finger Lakes Region
- Shore points along the route
- The Allegheny National Forest
- Shenandoah National Park
- The Monongahela, George Washington, and Jefferson National Forests.

Even though existing roadways will constitute the basic resource for the Northeast bikeway, human resources—people—will be needed to make it work. State-level committees will have to involve public recreation and transportation planning agencies at all levels of government. Most important of all, however, will be the private bicycling organizations in each State. Each coastal State from Maine to Virginia will need to be a link in the chain, just as these same States found common bonds in the creation of the United States 200 years ago. People working together will be a theme and a re-creation of this same spirit of independence.

The Northeast Region has a concept but needs a name for it. Please send suggestions for a name or other ideas to: Regional Director, Northeast Region, Bureau of Outdoor Recreation, U.S. Department of the Interior, 600 Arch Street, Philadelphia, Pa. 19106.

Pacific Coast Bicycle/Hostel Route

Burke-Gilman Trail, Seattle, Wash., is becoming a reality through the efforts of a number of interests working with Burlington Northern Railroad.

A Pacific Coast bicycle route from Canada to Mexico has been a dream of west coast cyclists for years. A cooperative effort to designate such a route in time for the Nation's 200th birthday in 1976 is now underway.

Under the leadership of the Bureau of Outdoor Recreation's Northwest and Pacific Southwest Regional Offices, working groups of Federal, State, local, and private agencies and individuals will research, review, and designate such a route. The 1,500-mile route will utilize secondary and scenic highways along the Washington, Oregon, and California coasts, taking advantage of numerous scenic, historic and recreational areas.

In conjunction with bicycle route designation, a special effort will be made to establish a border-to-border system of hostels to accommodate cyclists and hikers. Unused or underutilized Federal, State, and local government properties along the route will be examined as potential hostel sites.

Bike route designation is planned by the summer of 1975 and a skeleton system of hostels should be available by 1976. Maps detailing the bike route and a report listing existing hostels and potential hostel sites should be available by the spring of 1976.

Contact:

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San Jose Bicycle Club members tested the California Aqueduct Trail, driving 130 miles to reach the trail.

By Mike Wright
Northwest Region
Bureau of Outdoor Recreation

Developing a Regional Bikeway System

To add to the workshop setting, Jack Pahl dressed and equipped for his welcome.

Fifty Federal, Regional, State, and local government planners and recreation officials, and major private organization representatives met in Chicago October 16–17, 1974, to discuss the feasibility of an interstate bikeway system. Conceived by the Lake Central Regional Office of the Bureau of Outdoor Recreation, the system would use existing bike trails, utility and railroad rights-of-way, and suitable roadways. It could tie parks, recreation areas, historic sites, and interesting resources together through Minnesota, Wisconsin, Illinois, Indiana, Michigan, and Ohio. The 2-day workshops provided a forum where attendees could meet their counterparts in other organizations, discuss existing and proposed bikeways, and exchange ideas and information on specific aspects of bikeway development. The meetings were sponsored by the Northeastern Illinois Planning Commission, the Indiana-Purdue Cooperative Extension Service, and the Bureau of Outdoor Recreation.

Materials presented can be obtained from Lake Central Regional Office, Bureau of Outdoor Recreation, 3853 Research Park Drive, Ann Arbor, Mich. 48104.

Highlights of the sessions included:

BOR's Assistant Regional Director Fred Bender; Gene Schaaf, Chief of the Region's Technical Assistance Section; and Jack Pahl, Vice President, Northeastern Illinois Planning Commission, welcomed the group. Bender noted that the Bureau of Outdoor Recreation's Land and Water Conservation Fund program provides 50 percent grants for bikeways and related facilities and that the Bureau provides coordination and technical assistance. Schaaf called for descriptions of State, Regional, and local programs and urged thorough discussion of potentials for an interstate bikeway system. Pahl urged a goal of a bikeway around the Great Lakes by 1976.

Robert Mitton, Supervisor, Park Systems Planning, Ontario Ministry of Natural Resources, described some Canadian cycling activities. The Bruce Trail Association is estab-

lishing a trail along the Niagara Escarpment, three government task forces are studying planning and research, financing, and legislative needs; the national capital, Ottawa, has 36 miles of bikeways along canals and scenic parkways, and expects to have 74 miles by 1976.

Grant Peterson, National Park Service, said the Service is planning bikeways in the midwest but not presently considering a system. He hopes for trails along lakeshore areas, and connectors for historic sites, parks, and recreation areas.

Carl Brown, Army Corps of Engineers, stated that the Corps is paying 50 percent of the cost of developing some bike trails and systems. He promised cooperation to planners throughout the region. John Adamski, also of the Corps of Engineers, said the Corps feels that there must be multiple use of close-in levees and lakesides.

Bob Karotko, Ohio Department of Natural Resources, said his State is working toward a 110-mile State Bikeway, plus 8 other bike trails, and is considering hostel possibilities.

Jim Wicks, Michigan Department of Natural Resources, said park roads in the State are used heavily with 80 percent of the people in the parks using bicycles. He envisioned several trails in the Detroit area with a corridor trail around the metropolitan area, plus connectors for State parks along Lake Michigan with a possible tie by ferry to Wisconsin bikeways.

Gerald J. Pagac, Department of Natural Resources, said Indiana has about $200,000 available for bikeway use, is trying to develop a long-distance trail, and is working on a system of bike routes which will mainly consist of signing of county and State roads. His department has requested $690,000 for the coming biennium. Bill Grier, Indiana Department of Public Instruction, said the State has five agencies involved in bikeway programs: Tourism, Highways, Public Instruction, Natural Resources, and Regional Planning Commisions. His department has published cycling safety curriculum guides for grades kindergarten through 12.

Thomas J. Mracek, Illinois Department of Transportation, said four agencies—Transportation, Conservation, Public Instruction, and Tourism—are building toward a system for the State. Jim Kashmier of the same agency said a bikeways planning report was ready for transmittal to the Governor; the State hopes to come up with community plans and Department of Conservation connector route plans. A $3 million appropriation request is in Legislative Committee.

Rudolph L. Graf, Wisconsin Department of Natural Resources, reported for his State. His statement appears as an article in this issue.

Bill Morrissey, Minnesota Department of Natural Resources, said the State is working toward about 300 miles of bike trails, proposing to use $1.7 million of Federal Highway funds. He also reported the State is examining county roads which, if suitable, will be marked as a cycling route system. Minnesota's 104-mile Luce Line trail is to receive 20–25 miles of surfacing during the next year, he said.

Mary Casino, Northeastern Illinois Planning Commission, described efforts to extend and improve the Illinois Prairie Path and bikeways and trails in the Cook County and Dupage County Forest Preserves. Current work includes a feasibility study of a 6-Park-District trail venture in the Chicago Metropolitan Area. The year's program was planned to include transportation and recreation trails, but funding has forced emphasis on transportation trails.

Steve C. Allen, Northwest Indiana Regional Planning Commission, described a series of guides which resulted in a Regional Bikeway Guide. The Regional Guide has been a catalyst, spurring county and city parks departments to add connector trails for parks, historical landmarks, lakes, and other water bodies.

David Sanders, Southeast Michigan Council of Governments, described an Interstate Highway 275 proposal for establishing within 2 years 60 miles of bikeway separated from other traffic. Ann Arbor's 1973 bond issue provides for 91 miles of bikeways over a period of 20 years. Detroit plans 20-plus miles of bikeways within the county.

Peter Atonna, Consultant for the Toledo, Ohio, Council of Governments, says the city has planned loops from inner city areas, within 2 miles of residents, to take riders to open spaces and return. Loops run from 20 to 60 miles in length. The

Lake Central Regional Workshop participants represented all levels of government and many private interests.

City Parks Department is adding connectors to tie together parts of the loops.

Barry Barker, Northeast Ohio Areawide Coordinating Agency, Cleveland, said the Cleveland Metropolitan Park District is about half finished with incorporating bikeways in a park plan to encompass 17 communities. The City of Berea has established a primary bikeway system to connect shopping centers, parks, etc., and a secondary system extending from communities to the primary system.

James A. Peterson, Extension Specialist in Parks and Recreation, Indiana-Purdue Universities, led a panel discussion of Opportunities for Development of Bikeways.

William Greene, Bureau of Outdoor Recreation, Lake Central Region, discussed railroad rights-of-way for bikeways. He described the suitability of abandoned railbeds because of their surfaces, grades, bridges and other hardware, and location adjacent to or entering urban areas. He also explained the Bureau's Land and Water Conservation Fund assistance to bikeways, the coordination and technical assistance the Bureau provides, and the Bureau's circulation of information on Interstate Commerce Commission notices of railroad abandonment proposals. He also cited a Final System Plan being formulated under the Regional Rail Reorganization Act of 1973, P.L. 93-236. This will designate rail lines needed for continued rail service and others to be abandoned but designated as suitable for other public use such as recreation.

Eugene M. Lewis, Chicago & Northwestern Transportation Company, listed a number of requirements of agencies or organizations obtaining abandoned rail rights-of-way for cycling. These include permits, licenses, liability insurance, and willingness to work with companies on herbicide use, repairs, and other maintenance on cycle paths paralleling or crossing active rail lines.

Richard B. Taylor, Chicago & Northwestern Transportation Company, said his firm abandoned 1,350 miles of rail line from 1968 to 1972. Requirements of environmental impact statements in mid-1973 slowed abandonments to a total of 19.7 miles in 1973 and 1974. The company has proposed 1,400 miles of abandonments, now pending before the Interstate Commerce Commission. He noted sale in 1965 to Wisconsin of the Elroy Sparta Trail route, consisting of 33 miles of right-of-way for $12,000. This amounted to less than $20 per acre for roadbed, bridges, bridge decks, timbers and certain buildings. However, right-of-way values have changed. ". . . Most appraisers now look at a right-of-way . . . as having a value higher than the surrounding properties under a so-called fair market concept," he stated. "Representing a profit-making corporation as we are, it is the responsibility of the Real Estate Department to negotiate the best possible prices for the properties involved," Taylor said.

Railroad rights-of-way use for cycling in an earlier day.

Frank J. Cortese, Commonwealth Edison Company, discussed utility rights-of-way for cycling. The company leases power line rights-of-way to many diverse interests including schools, parks, baseball clubs, forest preserves, and churches. He cited the Palatine Park Trail, Palatine, Ill., and the Illinois Prairie Path as examples of hiking and biking trails on Edison rights-of-way. Additional use of the company's lines for trails many times conflicts with other existing uses, some of long standing such as neighborhood gardening, etc. Permits, insurance requirements, and agreements for uses compatible with existing lines and towers were listed by Cortese as necessary when company rights-of-way are converted to multiple uses. He urged promotional campaigns to gain the support of a majority of the people in the general area of a right-of-way being considered for bikeway use.

Carl E. Jager, Michigan Department of State Highways and Transportation, noted that much of the bicycling now being done is on public streets and highways. Safety education, law enforcement, and increased cycling facilities are needs to be met in the future. Jager cited a Statewide Bond Proposal before voters this fall to provide $1.1 billion for transportation; $25 million would be set aside exclusively for nonmotorized transportation facilities, mostly bicycle paths, to be constructed over the next 15 years.

Peter L. Wise, Northeastern Illinois Planning Commission, spoke to the group on Interorganizational Agreements, Policies, Model Leases, Etc. "Because trails are linear in nature and thus tend to cross political boundaries on various rights-of-way, interorganizational cooperation is mandatory for success in retaining necessary continuity of the system. The Northeastern Illinois Planning Commission has devoted a great deal of effort to the topic of intergovernmental agreement contracts. We

The Belle Isle Bicycle Trail, now designated as a National Recreation Trail, Detroit, Mich.

A unique midnight architectural cyclists' tour of Chicago's Loop by the Chicago School of Architecture Foundation and the Illinois Arts Council commemorated Picasso's birthday.

Cook County, Ill., Forest Preserve District trail.

are aware of approximately 750 intergovernmental agreements which have been reported by less than 200 of the municipalities in our 6-county area. Those agreements include diverse items such as public safety, purchasing, land use control and boundary agreements, provision and exchange of social services, planning, libraries, transportation, and public works of numerous kinds," Wise said. As an example of the necessity for these agreements, he said: "It would be ludicrous to have each park district purchase the equipment necessary to maintain some 100 feet of Commonwealth Edison Right-of-way."

Ken Rickerson, Federal Highway Administration, Homewood, Ill., described Federal Highway Administration funding of bicycle facilities. His remarks have been paraphrased in an article on Federal Highway Bicycling Programs elsewhere in this issue.

William Hosfield, Minnesota Department of Natural Resources, reported the State's unrefunded snowmobile gas tax amounts to $1,045,000 per year. Much of this is used for multiple use trails suitable for cycling during warmer months of the year. He mentioned several existing and planned trails in the State, one of the most interesting being a cross-country trail from St. Paul to Duluth. Possibly it may eventually extend 220 miles ending in Jay Cooke State Park. A need exists for new sources of State funding like bonding, user taxes, and excise taxes, Hosfield said. The best course of action, however, appears to be presentation of a program by the Department of Natural Resources to the Legislature for funding.

Morgan Groves, League of American Wheelmen, and Dan Burden, Director of Bikecentennial '76, presented statements which appear as articles elsewhere in this issue.

Robert M. Cleckner, Bicycle Institute of America, told the group that as of January 1, 1975, the Bicycle Institute of America will no longer exist in its past form. The new Bicycle Manufacturers Association will represent cycle manufacturers. James J. Hayes will serve as BMA Executive Director with headquarters in Washington, D.C. Safety is the name of the game in cycling's future, Cleckner said. We must have alternative means of transportation and the bicycle is here to stay. When asked about use of excise taxes to finance facilities, Cleckner said the Bicycle Institute recommends national registration of bicycles.

This would be useful in counting the numbers of cycles, controlling theft, and in financing needed bikeways and related facilities.

Gunnar A. Peterson, Executive Director, Open Lands Project, Chicago, led a concluding session entitled "Where Do We Go From Here?" Those attending felt it was valuable to find out what other planning organizations within the region were doing in the way of bikeway development and to discuss the various planning and development approaches. Several organizations indicated that they would go ahead with plans to connect their bikeways with adjacent bikeway developments where possible.

Participants recognized the need to maintain liaison and coordination among organizations. They also called for continued dissemination of up-to-date technical information.

Recommendations included:

1. BOR's Lake Central Region and Region 5 of the Federal Highway Administration should consider cosponsoring a meeting soon to provide further information on bikeway design, safety, etc.

2. The Lake Central Region should prepare and distribute a map of the 6-State region showing the major bike routes being planned in each State. The region also should supply further information on how to resolve title problems for railroad abandonments and on approaches for use in acquiring rights-of-way from railroads.

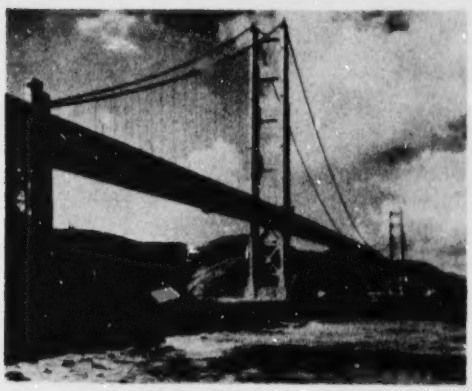
3. The National Field Director of the Bicycle Institute of America should provide an updated bibliography related to bikeway safety and design.

A Green Light for Hostels in California

By William K. Dickinson
Pacific Southwest Regional Office
Bureau of Outdoor Recreation

A long term interest in hostels in the eastern portions of the United States has led to a more developed network of hosteling accommodations there than in other areas of the country. However, in the past year, major studies have been made in California towards establishing a Statewide hostel system. Some of the California efforts provide examples that could be applied in expanding hosteling opportunities in other parts of the country.

The local councils of the American Youth Hostels, Inc., have long been active in California. Right now there are eight AYH-accredited youth hostels in the State, existing both on private lands and on Federal lands under special use permits.



Fort Point National Historic Site, a part of the Golden Gate National Recreation Area, is an easily visited part of the National Park System.

Hostels, per se, are simple, basic structures that serve as low-cost accommodations and/or direct support facilities for touring and outdoor recreation activities. Customarily, hostels are supervised and provide separate dormitories, toilets, showers, and common areas for cooking, dining, and recreation. Park managers at the Federal, State, and local levels are recognizing the value and need for safe, low-cost, all-weather accommodations to meet the needs of those who prefer to travel light and enjoy the communal aspects of hosteling. As a result, AYH is no longer alone in seeking an integrated hostel system for California and the West Coast.

In March 1974, Mrs. Anne Morton, wife of Secretary of the Interior Rogers C. B. Morton, convened a meeting in San Francisco to discuss a synergistic approach to assisting the hosteling movement. Representatives of Federal and State land managing/human resource agencies and AYH, Inc., on the West Coast pledged their support. The following discussion addresses three major levels of endeavor to advance hosteling on the West Coast.

AYH, Inc., Golden Gate Council Activities

A prime example of what it takes to get a hostel into operation is the effort of the Golden Gate Council of the American Youth Hostels, Inc. The Council is engaged in the establishment of a 180-bed hostel at Fort Mason in San Francisco. The planning of this facility has involved a great deal of public-private cooperation and, if approved, will provide safe, simple, low-cost overnight accommodations for many travelers to the San Francisco area seeking only a place to lay their sleeping bags and cook a meal.

Two years ago, the need for such a hostel facility brought together representatives from the International Hospitality Center, the San Francisco Traveller's Aid, San Francisco Rotary International, and AYH to explore the problem. Contact was made with youth organizations, churches, schools, consulates and travel-related agencies, all of which indicated support for such a facility. Consequently, the council began searching for a building to meet the hosteling need. The Superintendent of the Golden Gate National Recreation Area was eventually contacted and asked for space in one of the under-utilized structures at Fort Mason. His response was enthusiastic and a cooperative working relationship between the local council and the National Recreation Area has been established.

The third floor of an abandoned warehouse in the wharf area of San Francisco at Fort Mason was initially designated for consideration. Shortly

thereafter, in 1973, AYH engaged a San Francisco architectural firm to prepare preliminary plans for the conversion of the warehouse space into the San Francisco International Youth Hostel. First-floor space for an information and receiving area, and third-floor space for dormitories, family rooms, sanitary and laundry facilities, cooking, eating and social rooms, house parents and assistants' quarters as well as a supervised storage area have been planned. Recently, the National Recreation Area staff identified a similar warehouse for consideration, identical in size and construction to the original but in better condition. The preliminary plans were adapted with minor modifications for a probable 30 percent savings in remodeling cost.

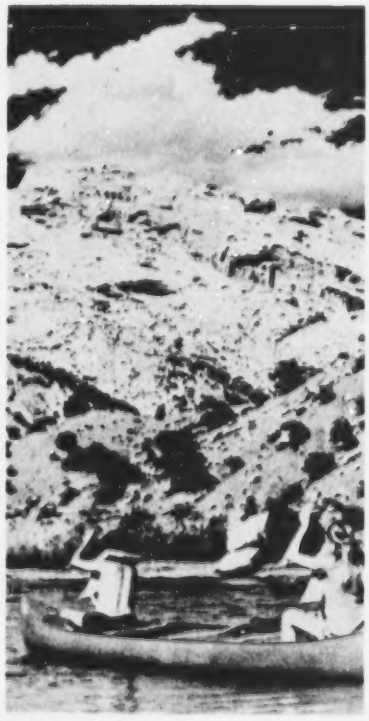
It is calculated that a 30 percent occupancy rate is needed for the facility to be economically self-sufficient. Revenue estimates include overnights, coin machines, and rentals. Expense estimates considered personnel salaries, travel, utilities, repair and maintenance, cleaning services, linen service, telephone, cleaning supplies, office supplies, printing and promotion, fire insurance, miscellaneous, and contingencies.

A fund raising campaign will be held to raise the necessary money for development and first year operation expenses of the Fort Mason hostel.

In contrast, a former dairy farm was converted into the 40-bed Laguna Ranch Hostel after 1½ years of weekend volunteer labor by over 100 Golden Gate Council members at Point Reyes National Seashore. The Point Reyes hostel is 1½ hours from San Francisco and one mile from the Pacific Ocean in a completely rural area. It is being operated under a special use permit granted to AYH, Inc., by the National Park Service. After the first quarter of its third year's operation, the hostel has reached a 30 percent occupancy rate and is economically self-sufficient.

The efforts of the local AYH Council and National Recreation Area officials provide an excellent example of a cooperative public-private planning effort. The wealth of knowledge already gained and to be gained from the planning for development, management, and operation of this facility should serve as an example for the establishment of other hostels in the American system.

The final proposal for the Fort Mason facility will be presented by the Golden Gate Council, AYH, to the National Recreation Area staff by December 1974. It is hoped that the facility will be approved and in operation in time for the Bicentennial celebrations. In further consideration of the proposed Fort Mason hostel, it should be noted that the property was transferred from military possession upon determination that it was excess to military needs, to the Department of the Interior to be administered by the National Park Service as part of the Golden Gate National Recreation Area. If the Golden Gate Council's plan is approved by National Recreation Area officials and management of the proposed facility is obtained by the local council then the property will have passed from the military to



Hostels provide low-cost accommodations in support of outdoor recreation activities.

management and use by the private sector.

Federal Properties and Hostel Opportunities

Use of Federal properties and/or structures under a special use permit or converting excess or surplus Federal properties and structures for hostel sites could be an economically effective means of achieving a continuous hostel system.

To realize the potentials of this process for funding low-cost hostel sites, the Bureau of Outdoor Recreation requested the Office of the Assistant Secretary of Defense to appoint a west coast representative to work with the Bureau on the use of excess or under-utilized structures for hostel-type accommodations. Charles G. Ellington, West Coast Regional Director, Office of Economic Adjustment, was appointed. Since that time, information has been forwarded to the Office of Economic Adjustment regarding various hostel programs and the Bureau of Outdoor Recreation's interest in establishing a nationwide hostel system. To date, Ellington has identified several sites for potential hostels and is exploring possibilities for having hostels considered as one of several uses by the public agencies that could eventually be applying for excess or surplus property. This early identification can be timely in allowing for an evaluation of the alternative uses and/or joint uses of a given site.

Federal properties which are declared excess by the holding agencies are reviewed by other Federal land managing agencies. If it is determined that a piece of excess property could be used to meet the needs shown by a reviewing Federal agency, the property is transferred to them. However, if the property is not needed by another Federal agency, it is considered surplus to Federal needs and is made available for review and application by States and their political subdivisions. The General Services Administration reviews the applications to determine which one provides the best utilization of that property. The property is then transferred to the selected agency, usually at no cost. This type of transfer is a possible alternative to the more costly acquisition and development of private property for hostel uses.

Surplusing and transfer of Federal properties can be a very lengthy process. Under circumstances where the only application for a piece of surplus property is for hosteling purposes or when all agencies applying for a site are able to come to an understanding and agreement on its joint usage, an interim lease or special use permit for the site (until GSA makes final disposal) might be possible. When possible, such interim usage provides for protection and maintenance of a site until it is officially transferred.

It is additionally foreseeable that the States and their political subdivisions could obtain the use of Federal properties by way of a special agreement (lease/special use permit) on a temporary basis, when the property is not to be transferred as surplus. At times, Federal properties are temporarily underutilized but very much a future need of the holding agency.

When the temporary use of such a Federal property is possible, a 25-year or more agreement would establish a status qualifying the property for Federal grant-in-aid assistance. Land and Water Conservation Fund grants are a possible funding source for the acquisition and development of recreation trails connecting hostel sites as well as for the development of hostel facilities. L&WCF monies have been spent for the acquisition and development of various public trails systems but, to date, none have been used for hostel development. This could be attributed to the fact that an uncertainty exists among local park and recreation staffs as to whether or not hostels are eligible for L&WCF grants-in-aid. If properly planned and presented, hostels could qualify for funding.

To qualify for such funds, hostels would have to be identified as needs set forth in the State comprehensive outdoor recreation plan, act as a direct support facility to an outdoor recreation activity, e.g. recreation trails, be simple, basic structures, and be owned, sponsored, and administered by a public agency of government. If the Land and Water Conservation Fund Act of 1965 is again amended it would be helpful if hostels were specifically identified as eligible support facilities.

Another approach could be direct Federal subsidy for a nationwide system of hostels as is done in some of the European countries and Canada. Legislation would be required to establish such a nationwide system. The legislation would have to be broad enough to provide for funding hostels on Federal land and providing grants for construction by State and local governments and accredited agencies. The legislation could establish standards for hostel operations and provide for an accreditation program so that full use could be made of a variety of low-cost accommodations to meet hosteling needs. Additional legislation could allow the transfer of surplus personal equipment to park and recreation departments. Hostels could be classified as an allowable recreational use and eligible to receive transfers of personal property.

State Legislation for Hostels

This year the California Department of Parks and Recreation has gotten the "green light" to provide a Statewide system of trails and low-cost overnight accommodations for non-motorized recreationists. Enactment of S.B. 420, the Collier-Keene State Hostel Facilities Act, appropriated $2.1 million. The 1974 budget bill provided an additional $1.9 million from surpluses in the State's Abandoned Vehicle Trust Fund for the planning and development of a Statewide system of trails and hostel facilities. As a first step, California let a $60,000 contract with a consulting firm for a report on a system of trails and hostels. The hostel portion of the report is addressing: General functions, design features, and services of hostels; a conceptual analysis of hostels; an analysis of the cost, economics, and financial feasibility of development, operation,

and maintenance, and an evaluation of operation alternatives.

The hostel facilities study task sequence will address these objectives through the following phases:

Phase I

I. Determine and analyze the location, function, design, and operation of existing hostel facilities.

II. Estimate the demands for hostel facilities based on trial utilization projections.

III. Establish the policies, goals, and overall objectives for development of a Statewide hostel system through consultation with the California Department of Parks and Recreation and other appropriate governmental agencies and recognized hostel organizations.

Phase II

IV. Develop hostel location, operation, and design criteria for an integrated system of Statewide hostel facilities. Alternative criteria will be identified and considered, where appropriate.

V. List general cost estimates for the recommended hostel designs; discuss cost of alternatives and major considerations in determining costs.

VI. Evaluate potential hostel financial performance as individual units or as part of a system.

VII. Develop the conceptual framework for a Statewide system of hostel facilities.

VIII. Prepare guidelines for implementing the proposed Statewide hostel facilities system.

So far, the initial planning efforts have been directed toward an examination of existing hostels, an evaluation of who the potential California hostel user is, and a determination of what type of hostel facility would best meet the identified user's needs.

In developing both the system of trails and the hostel network, the State is giving highest priority to areas along the coast, areas close to major population centers and areas possessing high demand for these types of recreation facilities. Links between the urban centers, adjacent open spaces, internal city recreation facilities, and other points of interest will have to be high on the priority list if the overall objectives are to be met.

So far, planners have identified a variety of sub-types of each major user group—bicyclists, hikers, and equestrians—in order to focus on the types of facilities needed by each group. They have identified two types of low-cost accommodations to meet the need:

The Sheltered Campground—A campsite similar to those found in existing campgrounds with the addition of some type of simple weather shelter and some form of bicycle security system, corral, hitching post, and watering trough for horses.

Hostels—the more traditional facility providing sleeping accommodations, a kitchen area for food preparation, in-house restroom and showers, and a dining/meeting/recreation room, all under the supervision of live-in people.

At the same time, the planners have asked the important question of whether or not they can limit facilities to use by non-motorized people, or to recreational travelers as distinguished from people merely traveling from one point to another for utilitarian purposes. As they point out, the provision of low-cost overnight accommodations for the highway hiker is needed to lessen the safety hazard faced by this type of traveler and, at the same time, to reduce the incidence of minor trespassing, loitering, and property damage along the State's major highways. This raises the basic question as to whether provision of low-cost, hostel-type accommodations can be limited within the traditional objectives of a park and recreation agency, or whether some of the features of this program may fall more nearly within the purview of an emergency community housing program which would not be the sole responsibility of a park department. The program will also have to come to grips with some other basic policy issues such as age limits, reservation requirements, limits on length of stay, hours of operation, fees, acceptable user conduct, sleeping arrangements, and financial support. Then there is the question of whether the facilities should be operated by the State Park Department or by concessionaire who would operate either separate hostel units or an entire hostel system.

At this point, the planners state that the State Department of Parks and Recreation should establish some pilot facilities of both the sheltered campground and hostel types and try both types of operation. The Department should experiment with concessionaire management. Regardless of the number and scope of the problems that seem to face California's entrance into this new field of recreational accommodations, the Department of Parks and Recreation sees tremendous opportunities for increased citizen participation in recreation that this type of program can offer. Also, there are possibilities for helping to deal with some major, broader problems to which this program can offer partial solutions.

The State is exploring the possibilities of AYH, Inc., accreditation of the hostels and possible AYH, Inc., management under special permits. It is becoming apparent that the State is now ready to expand their system much more rapidly than present AYH capability. The California hostel study can serve as a guide for initiating similar statewide efforts elsewhere.

Only through involvement from the Federal, State, local, and private sectors can hosteling be developed to the point of realizing its full potential.

The author borrowed freely from the following contacts:

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Statewide Studies Section
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Virginia-Delaware Corridor Study

The Bureau of Outdoor Recreation in conjunction with American Youth Hostels, Inc., Virginia's Commission of Outdoor Recreation, Delaware's Department of Natural Resources and Environmental Control, and bicycle groups in both States, will conduct a study to identify potential hosteling sites in these States. The objective is to locate "recreation corridors" along which hostels could be established.

Once identified, corridors will be plotted on maps, which will then be distributed to Federal, State, and local land managing entities and key groups, organizations, and people in the States, as well as to the general public. Those contacted will be asked to consider the possibility of establishing a hostel and to identify potential sites for a hostel. This information will be used to supplement the information BOR has been able to gather. The next step in the study will be analyzing the information and determining the feasibility of establishing hostels in accordance with AYH staff and hostel selection criteria. The study will be published in 1975. Those contacted during the course of the study will be encouraged to generate community interest in hosteling in order to help ensure the establishment of hostels on the sites identified.

One of the reasons for the cooperative effort between BOR, AYH, Virginia, Delaware, and the public on this study is to assure follow-up on the Department of the Interior's first Nationwide Outdoor Recreation Plan, "Outdoor Recreation—A Legacy for America." This publication has as one of its main thrusts bringing about more private involvement in increasing the Nation's outdoor recreation opportunities. The hosteling study is an effort to involve those in the private sector who are interested in the outdoors and increasing recreational opportunities. The old cliché, help yourself by helping others, plays an important role in this effort. Those contacted will help themselves by giving information needed to complete the job, assuring that the hosteling locations of their choice will be included in the study. BOR's solicitation of ideas helps to implement the Nationwide Outdoor Recreation Plan by getting people involved.

BOR and the two States believe hostels are very important. Hostels are one way for people to explore, discover, experience and understand nature, a concern to us all. In addition, hosteling facilities can contribute significantly to a community's recreation and education programs. Hostels for example can provide a meeting place for civic organizations, arts and crafts exhibitions—in general, a place for people to get together and exchange ideas.

BOR's Northeast Region is planning to review the Grants-in-Aid, Surplus Property, Trails, Rivers, and Federal Land Acquisition programs to see if they can be used for hostels. Such possibilities as having a hostel included along a National Trail, having certain grant-in-aid projects include provisions for a hostel, or even including a hostel in a National Park, National Forest, or other Federal land uses will all be explored by BOR.

In this day of high costs and low energy, hostels provide an opportunity for an escape weekend, week, or month. Also, the "youth" in American Youth Hostels means the young in heart. Everyone can enjoy the outdoors. Hostels help to keep accommodations wholesome but inexpensive. Local participation in the form of suggestions, criticisms, assistance, and just plain interest is needed for this study and for future work on hostels.

For more information, contact: Edward "Ted" Davis, or Maureen Sweeney, Bureau of Outdoor Recreation, 600 Arch Street, Wm. J. Green, Jr. Federal Building, Philadelphia, Pa. 19106; Telephone (215) 597-7387.

By Maureen E. Sweeney
and Edward C. Davis
Northeast Region
Bureau of Outdoor Recreation

Progress on the Wisconsin Bikeway System

By Rudolph L. Graf
Planning Analyst
Wisconsin Department of Natural Resources

Activity toward accommodating Wisconsin bicyclists began with the Department of Natural Resources' railroad acquisition program in the early 1960's. A few individuals, independent of one another, became aware of the potential of railroad grades for recreational trails. They were all employees of the State but were scattered throughout separate agencies. The maneuvering they went through is too involved to relate here but it can be stated with reasonable accuracy that the railroad grade acquisition program did not evolve from a coordinated agency policy or planning process.

Now this has all changed. Communications with the railroad corporations were developed. Communications between DNR and the Public Service Commission were established and all interested parties now are informed well in advance of pending right-of-way abandonments.

The DNR uses a system to evaluate the significance of each railroad grade. Based on this evaluation the DNR proceeds toward acquisition or refers the evaluation results to other units of government with interests in the right-of-way.

A Department policy on railroad ROW acquisition has evolved. Eventual State legislation will expedite the process of transferring these rights-of-way from publicly licensed utilities to public agencies.

The success of the DNR railroad acquisition and development program is epitomized by the number of users of the "old railroad grades." Last year alone over 38,000 recreationists used the Elroy-Sparta State Park Trail.

Even though the railroad acquisition program could not be ascribed to a sound planning process, the development of an Interagency Bicycle Task Force might have been the result, at least tangentially, of some planning processes. In early 1972, the DNR and the Department of Transportation (DOT) formed a Task Force to address mutual problems, identify areas of responsibility, and recommend action to accommodate future bicycling in Wisconsin. The task group has since developed "Guidelines for Developing Ur-

The Wisconsin Bikeway uses rural roadways.

Cyclists tour the Wisconsin Bikeway.

The Elroy-Sparta State Trail.

ban Bikeways" and "Guidelines for Developing Rural Bikeways."

At about the same time the Task Force was formed, the DNR began a formal Trail System Planning program. The Bureau of Planning was assigned the responsibility to develop a comprehensive, statewide trail system plan. A bicycle system will be a major component of this plan. Together with DOT via the Interagency Bicycle Task Force,

ugar River Trail is a State of Wisconsin facility.

DNR is currently developing the bike system as a rural, highway-related, primarily recreation-oriented bicycle system.

Planning has progressed to where two system designs have been selected from several basic designs. Citizen ideas, suggestions, and contributions were used to choose and recommend from alternatives the best strategy for meeting needs and solving problems of the bicyclist. These two system designs are now part of DOT's interim Transportation Plan.

The major areas of consideration and the criteria for Wisconsin's bikeway system plan were outlined by the author and F. J. Thompson in "Transportation Without Gas," Wisconsin Conservation Bulletin, Vol. 39, No. 3, 1974.

Two other Bureaus within DNR are involved in bicycling. The Bureau of Commercial Recreation, through partial funding by the Wisconsin American Revolution Bicentennial Commission (WARBC) developed a brochure (tentative title: "Wisconsin Bike Trails") with maps to provide information on existing routes and facilities of interest to bicyclists. This book will be all an avid bicyclist will need for planning a bicycling vacation in Wisconsin.

This Bureau was also instrumental in the development of the 300-mile Wisconsin Bikeway in the early 1960's. The Bikeway was dedicated in 1966 and is one of Wisconsin's most publicized recreation attractions. Ironically, it is nothing more than a series of secondary roads linked together on a map. Signs were initially installed but they have not been maintained or replaced since their original placement. With the exception of selected counties, most segments of the Bikeway are indistinguishable from any other town or county road. Yet, the Bikeway has drawn remarks from well known European cyclists as being "a better ride than anything in Europe."

The remainder of the bikeways in Wisconsin were established by each county. This means that each county really determines the extent of its officially designated bikeways, and explains why differences occur in the respective counties.

The DNR's Bureau of Parks and Recreation is responsible for the acquisition, development, and maintenance in the Linear State Park Program which utilizes railroad rights-of-way. This program has been extremely successful.

In early 1973, the Wisconsin American Revolution Bicentennial Commission began playing a key role in bicycle affairs in the State. They formed a sub-committee to determine what kind of role they should play. The WARBC crystalized bicyclist interest into action at the grass roots level. This action culminated in a statewide bicycle conference held at Wingspread in Racine, Wis. The future thrust of WARBC will be in the legislative realm of bicycling.

Other parts that make the whole of Wisconsin's experience are the regional planning commissions, well organized bicycle groups, and active citizens. Regional planning commissions are playing key roles in the development of local bicycle systems. The development and nurturing of bicycle planning interests was the key. The State's role was in leadership, coordination, and technical assistance in the way of providing information.

Well organized bike groups provided valuable advice, input, and feedback to State planning agencies, the Bicycle Task Force, and to WARBC. The bicyclists provided the thrust for the grass roots interest and involvement. Groups unknown before have come forward and assisted in plan formulation.

Citizens active in the bicycling world played key roles. For example, the publication of the book, "Wisconsin Bike Trips," by Phil Van Valhenberg provided needed visibility at the right time.

The Basic Elements that Helped Wisconsin include:

The Interagency Bicycle Task Force opened up communication between two State agencies.

Planning efforts were formalized at State and local levels. The State provided leadership and acted in the roles of coordinator, advocate, liaison, and technical assistance.

Planners took an advocacy role and developed that attitude in non-planners throughout State planning organizations.

WARBC crystalized grass roots involvement in bicycling.

Several well organized bicycle clubs provided advice, input, feedback, and support at appropriate times.

Bicycling visibility came through the publication of many reports, brochures, and books.

In summary, each part of the whole plays a changing key role. Bicycling is coming full wheel in Wisconsin.

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The Fairfax County Trail Program

By William C. Wilkinson,
Trail Planner
Fairfax County Park Authority,
Fairfax County, Va.

The Fairfax County, Va., Trail Program has evolved from an initial effort to provide recreational trails to a comprehensive program to plan and develop a County-wide system of facilities for alternative forms of transportation (pedestrians and bicycles) as well as trails for recreational use. It has developed with the continuing support of County officials, the cooperation of many local government agencies, and the active participation of local citizens. Following is a description of the program and how it has functioned.

Fairfax County, located in the Washington Metropolitan area, is slightly over 400 square miles in size. It has a population of approximately 560,000. Development in the County ranges from highly urbanized areas, to typical suburban subdivisions, to new town developments, to traditional Virginia rural countryside. Existing transportation facilities also run the full gamut from high volume, high speed Interstate Highways to country lanes that have changed little in character or design in the last 50 years.

Approximately 3 years ago, the local governing body, the County Board of Supervisors, initiated a program to develop a County-wide trails plan. The concept called for a system of recreational facilities to serve hikers, bikers, and equestrians. The responsibility for the development of the plan was assigned to the Fairfax County Park Authority. In the course of the next 12–18 months, various aspects of the development of such a system were considered, including potential utilization of utility rights-of-way, questions of liability with regard to trails built on easements, the costs of trail development, etc. Citizens were asked their views on the general location of trail facilities. A generalized plan and handbook for a 312-mile County-wide system, oriented primarily toward stream valley and park locations, was developed and presented at public hearings as a proposed amendment to the County's master plans.

Author Wilkinson and friends leave the Watergate behind in Washington, D.C.

The hearings produced mixed results. There was broad public support for the concept of a County-wide trail system but a great deal of individual concern regarding the specific location of facilities shown in a highly generalized fashion on the plan. At the conclusion of the hearings, the Board of Supervisors directed that the original plan be redeveloped with new opportunities for public participation, prepared on larger scale maps, and presented on a Planning District basis. There are 14 Planning Districts in the County, each with its own master plan. Further, the Board approved two identical amendments to the County's rezoning and site plan ordinances requiring developers to construct trails identified as part of an approved master plan, so as to meet standards set by the County, and to dedicate these facilities to public use. The Park Authority created and filled a new position of Trail Planner to coordinate the planning and development of the County-wide Plan.

The planning initiative was shifted to the citizenry. Over 100 meetings were held throughout the County with civic associations, women's clubs, etc., to explain the program and encourage local participation. Citizen Trail Committees were set up to cover all of the County. Because of the size of the area being considered, the desire to have people deal with their own neighborhoods, and the structure of the local government, several committees were established.

The primary functions of the citizen committees are twofold: First, to prepare a plan for alternative transportation facilities and recreational

trails, and second, to consider priorities for development. Individual committees have established their own organization. Great emphasis has been placed on bringing the planning process to the local level to provide an opportunity for full participation by local communities and to reflect individual interests adequately, both pro and con. The role of the Trail Planner has been to provide technical support to the committees and to insure coordination and compatibility between the individual committees.

The significance of the citizen participation in the planning process cannot be overstated. In the widespread understanding and support generated for the program objectives, and in the quality and comprehensiveness of the plan being produced, the citizen planning program has more than proven itself. Additionally, the evolution of the plan through the citizen committees has resulted in a constituent developed proposed system, not a County government one. Thus, plans eventually presented to the governing bodies of the County receive a greater degree of support than would otherwise be the case.

While the committees were getting themselves established, the objectives of the Trail Program were being redefined. The earlier thrust for recreational trails, already expanded to include identification of recreation facility access, was further broadened to consider transportation potentials and needs of both pedestrians and bicycles. To facilitate presentation and discussion of the locational criteria applicable to the different aspects of the newly constituted Trail Program, two major program elements were stated:

Alternative Transportation System (ATS)—A fully integrated network of routes designed to provide access from homes to schools, parks, other public facilities, shopping, work, etc. Generally, identifying those public thoroughfares likely to be used by pedestrians/bicycles for utility purposes. The inference here is that there should be special consideration for pedestrian and bicycle safety along the highways indicated.

Recreational Trail System (RTS)—Those facilities, generally located along stream valleys and through park lands, which primarily would serve the demand for recreational trails. They would be interconnected to as great an extent as possible and further served by ATS facilities.

The potential for facilities identified as a part of either the ATS or RTS to serve the needs of other types of users should not be overlooked. A route along a stream valley viewed initially as a recreational trail may prove to be a pleasant utilitarian facility if properly designed. Likewise, many people may enjoy an evening ride "around the block" if provisions have been made for the safety of cyclists along the highways and streets.

Autumn cycling in the Washington, D.C., metropolitan area takes author Wilkinson along a boarded trail.

The Committees have moved ahead with planning efforts. One area has been planned, brought to public hearings, and approved. As anticipated, the majority of the routes identified are along the major public thoroughfares—high volume, high speed roads—and along stream valleys. The remaining areas of the County will be completed in the next few months.

The development phase of the Trail Program is extremely complex. It is described here in general terms to lend perspective to the planning process. Essentially, there are three opportunities for facility development. First, as discussed before, is under the conditions of the appropriate County Ordinances, when a tract of land is developed to provide a facility called for in the Master Plan. Second, is by the Virginia Department of Highways and Transportation. The Department is responsible for development and maintenance of all public roads in Fairfax County and controls all development moneys. Under conditions recently announced, the Highway Department will include pedestrian and bicycle provisions in conjunction with highway improvement projects. The third opportunity for facility development is with funds set aside for this purpose by the County Board of Supervisors.

Citizen participation has played a significant role in facility development using County funds. Guidelines establishing criteria for projects to qualify for funding were put together. These were distributed to citizen committees working to develop plans for ATS/RTS facilities and to the general public through newspaper articles. Suggestions were solicited for projects conforming to these guidelines and the communities were asked to consider identifying priorities in their areas. Generally, projects which offer an opportunity to serve large numbers of people with an alternative transportation option are given primary consideration. Additionally, an effort is made to distribute the development of new facilities throughout the County.

The Fairfax County Trail Program is an ongoing program. Much has been done during the last 3 years; many things have been learned. While the initial planning phase is successfully nearing completion, the bigger task of facility design and development is just beginning. Most important, though, are the concepts of a County-wide Alternative Transportation System and the precedent established for broad citizen participation in all phases of the program. With these as a foundation, the program ultimately will succeed.

Bart/Trails

A Study of the Commuter and Recreational Trail Potential of the Bay Area Rapid Transit System

BART/TRAILS is the result of an unusual and demanding planning effort in the San Francisco Bay Area. Stated simply, the study seeks to improve commuter and recreational access to and from BART (Bay Area Rapid Transit) stations.

The plans and recommendations contained in BART/TRAILS have been developed as a result of considerable effort by interested and concerned citizens and public officials throughout the San Francisco Bay Study Area.

Initially, People for Open Space, a San Francisco-based grass-roots conservation organization, proposed a study of bicycling, horseback riding, and hiking trails between BART and regional recreation areas. They wanted especially to identify BART-owned lands which might have potential for inclusion in a regional trails system. The goal was to link transit and trails into a system. Subsequently, the San Francisco Planning and Urban Renewal Association proposed that a commuter bicycle route system be developed in San Francisco, identifying and including suitable access to BART. Together, these proposals suggested an opportunity to study how BART could be effectively tied into a system of both recreational and commuter trails providing access to facilities serving both regional and local needs. The $50,000 study was jointly funded by the U.S. Department of Transportation (80 percent) and the East Bay Regional Park District (20 percent). While the study was prepared by the firm of Hart-Krivatsky-Stubee working in association with two other design and planning firms, representatives of BART and of the East Bay Regional Park District were also very much involved. In addition, wide citizen participation was sought by BART for this study. In the latter context, three different committees were organized—a Steering Committee, a Public Technical Advisory Committee, and a Citizen's Technical Advisory Committee. Participants on these committees lived and worked in all three of the Bay Area counties which make up the BART District: Alameda, Contra Costa, and San Francisco. Each of the committees held regular meetings and three countywide public hearings. This diversity of individuals and groups involved in the study led to a thorough BART/TRAILS study.

Discussion in the report focuses on trail planning activities and responsibilities of local, County, regional, and Statewide agencies and of non-public entities within the study area. BART's transportation and potential recreation roles are treated within the context of the various types of trail users, user requirements, and the range of possible lands and facilities which could be developed or adapted for trails.

Two plans are presented in the study, a Schematic Bicycle Plan and a Schematic Riding/Hiking Plan. While neither of the plans is intended to be a comprehensive plan for the 3-County study area, together they show a complete network of trails focused on BART, which can provide significant opportunities for both commuting and recreational purposes. Over 950 miles of arterial bicycle routes and nearly 640 miles of trails are shown on the schematic plans.

Four detailed pilot studies were completed and are presented in BART/TRAILS to show how trails could be most effectively tied into the BART system. The study areas were carefully selected for their contrasting physical, social, and economic characteristics.

The primary concerns of each study were to find trail routes which would:

—Provide convenient, safe, and attractive access to and from BART;

—Be practical to implement in the short-term; and

—Be appropriate examples to demonstrate certain potential problems and ways of solving them.

Three of the pilot studies were concerned with trails planning for commuter and recreational bicycling. These were located in San Francisco, San Leandro, and Richmond. The fourth study, located in Orinda, dealt with the issues involved in planning trails for recreational horseback riding and hiking.

Additional sections of BART/TRAILS discuss current and projected impacts of BART on commuter and recreational bicycling and on riding and hiking; existing and potential facilities associated with these activities; and potential sources of funding for implementation of the recommended trails systems.

The BART/TRAILS study concludes with a recommendations section entitled Summary/Action Program. Specifically, BART was urged to:

—Encourage greater use of bicycles for access to BART stations and provide ample, secure bike parking facilities;

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—Test the feasibility and desirability of transporting bicycles on BART;

—Modify policy on sales of excess lands to permit BART to donate appropriate property to park agencies;

—Permit bicycle rental trucks or trailers to use system parking lots on weekends and holidays;

—Actively seek to implement trails along appropriate sections of right-of-way;

—Review station design to improve access for bicycles and pedestrians;

—Consider access to regional recreation areas when selecting future extension alignments and stations; and

—Conduct a bicycle-riding/BART patron user survey.

The study requests incorporation of the schematic plans into the statewide comprehensive outdoor recreation plan and the Metropolitan Transportation Commission's Regional Transportation Plan, requests all cities and Counties within the study area to adopt the appropriate portion of the BART/TRAILS recommendations as part of the transportation element of their general plan, and urges the Association of Bay Area Governments to expand its open space plan to include a comprehensive trails study for the 9-county Bay Area under its jurisdiction.

Other recommendations urge establishment of six demonstration projects of specific bicycling or hiking routes; the East Bay Regional Park District to place priority on implementing trails identified in the study which provide direct linkages with regional parks; and encouraged coordinated transportation between BART, the other area transit systems, and bicycles.

NOTE: Copies of BART/TRAILS may be obtained from the Government Printing Office for $2.55 per copy. The Stock No. is TD-1.2:T 68/19 and the mailing address is: Superintendent of Documents, GPO, Washington, D.C. 20402.

Contact: Ms. Virginia P. Webster, Bay Area Rapid Transit District, 800 Madison Street, Oakland, Calif. 94607.

Worthy Notes

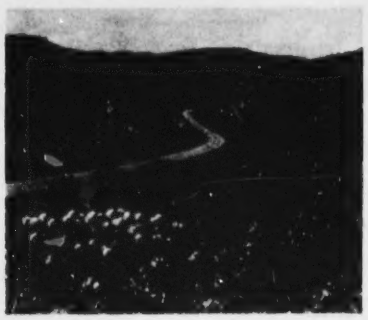
Cycling and Hosteling around the Nation

Reports received by the Bureau of Outdoor Recreation reflect much activity in bicycling and blossoming interest in hosteling. Past issues of "Outdoor Recreation Action" have reported on many Federal, State, local, and private programs to benefit these activities. The most recent reports, largely from the Bureau's Regional Offices, include the following actions.

Federal Actions

Department of the Interior's National Park Service is planning a number of bikeway and hostel facilities along national parkways. Plans are for a system of hostels along the Blue Ridge Parkway under sponsorship of American Youth Hostels, Inc., with separate bikeway facilities near the parkway at Asheville, N.C.

A Natchez Trace Parkway Study Task Force is preparing plans for the eventual construction of a system of bicycle, hiking, and equestrian trails along the old Trace through Tennessee, Alabama, and Mississippi, including rest stops or hostels every 50 miles. Contact: David D. Thompson, Director, Southeast Regional Office, National Park Service, 3401 Whipple Avenue, Atlanta, Ga. 30344.



A hostel chain is planned to serve the Blue Ridge Parkway.

Historic Mabry Mill is a highlight of the Blue Ridge Parkway, Va., and N.C.

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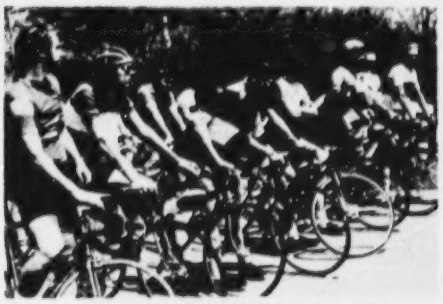
The Tennessee Valley Authority holds spring and fall bicycle races every year at the Land Between The Lakes recreation area. Sponsors are TVA, Kentucky's Western Waterland, and Jackson Purchase Wheelmen. Although Land Between The Lakes has no designated bike trails, some 400 miles of back country roads and multi-use trails are available for cycling. Bike tours of the area are held periodically with special patches and T-shirts for participants. In its technical assistance program, TVA is working with five communities to develop bicycle trail systems. Contact: Tennessee Valley Authority, Knoxville, Tenn. 37902, for details on these actions.



Tennessee Valley Authority's Land Between The Lakes, Ky., and Tenn., sponsors spring and fall cycle races.

State and Local

Alabama. Decatur, Ala., has an extensive bikeway system constructed entirely with local funds and labor provided by the Garden Clubs and Civic Associations of the city. Contact: Bill Mathews, Bicycle Committee, City Hall, Decatur, Ala.

California. A $60,000 contract with EDAW Inc., an environmental planning and design firm, by the California Department of Parks and Recreation calls for planning a statewide recreation trail system with hostel accommodations. Contact: Larry Paynter or Ray Chapman, Dept. of Parks and Recreation, 1416 Ninth Street, Sacramento, Calif. 95814.

Delaware. As part of the State's comprehensive outdoor recreation plan, Delaware has prepared a "State of Delaware Bikeway Study." It recommends a program to enhance and promote use of the bicycle. Contact: Secretary, Department of Natural Resources, Edward Tatnall Building, Legislative Avenue and D St., Dover, Del. 19901.

Florida. The State has issued a "State Bikeway Planning Guide and Plan" for use of $2 million of Federal highway funds for bikeways. Contact: Ney C. Landrum, Director, Division of Recreation and Parks, Dept. of Natural Resources, J. Edwin Larson Building, Tallahassee, Fla. 32304.

Georgia. The city of East Point, Ga., recently completed a bicycle race track, or velodrome, which will enable the city to host national and international events. The city and the Bureau of Outdoor Recreation are preparing a bulletin on the planning and construction of velodromes. This project was constructed with Land and Water Conservation Fund assistance. Contact: Dick Lane, Director, Department of Recreation, East Point, Ga. 30344.

East Point, Ga., has completed a new cycle racing complex with assistance from the Land and Water Conservation Fund.

Georgia. The State has issued State Bikeway Planning Criteria detailing design specifications for bikeways. Plans are underway for a State Bikeway Planning Conference in January 1976. Contact: Dowing Muskgrove, Director, Department of Transportation, 2 Capitol Square, Atlanta, Ga. 30334.

Illinois. A $250,000 grant from the Land and Water Conservation Fund to the State of Illinois will assist in purchasing 4.5 miles of abandoned railroad right-of-way to extend the Illinois Prairie Path in northeastern Illinois. Contact: Department of Conservation, 602 State Office Building, Springfield, Ill. 62706.

Kentucky. The State is preparing a Trails Plan to include bicycle trails. Contact: Tom Craighead, Director, Division of Planning and Grants, Department of Parks, Capital Plaza Tower, Frankfort, Ky. 40601.

Maryland. The Baltimore Regional Planning Council has formally accepted a report prepared by the Bureau of Outdoor Recreation's Northeast Regional Office, entitled "Baltimore Urban Recreation Analysis." A Federal-State-local agency task force is now working to carry out report recommendations which emphasize low cost public transportation and use of bicycles for inner city residents. Contact: Bureau of Outdoor Recreation, 600 Arch Street, Philadelphia, Pa. 19106.

Massachusetts. Under Federal Highway Administration authorization, the State Department of Public Works can spend up to $1.4 million of Federal highway funds for construction of bikeways. The first project is a 5-mile path from Oak Bluffs to Edgartown on Martha's Vineyard. Some 351 communities and regional planning agencies were asked if they were interested in bikeways; about one-half responded. Contact: Department of Public Works Commissioner Bruce Campbell, 100 Nashua Street, Boston, Mass. 02114.

New Jersey. Sixty-seven miles of the Delaware and Raritan Canal system in New Jersey became a State Park in October 1974. Enabling legislation appropriates $100,000 for a canal park commission with sole control over preservation on the portion of the canal from Raven Rock to Trenton. Contact: Commissioner, Department of Environmental Protection, P.O. Box 1390, Trenton, N.J. 08625.

New Mexico. The State recently completed a comprehensive statewide study of all existing and proposed trails and possible linking trail

segments. This includes analysis of land ownership and legal requirements for a State network. Contact: David W. King, State Planning Officer, Executive-Legislative Bldg., Room 406, Santa Fe, N. Mex. 87501.

New York. The State Office of Parks and Recreation is pursuing a 5-year development program to provide increased recreation along the 524-mile New York State Barge Canal system. This will include a statewide trail along the canal right-of-way to connect State and local parks. Contact: State Office of Parks and Recreation, South Mall, Albany, N.Y. 12223.

New York. The State's comprehensive outdoor recreation plan notes that introduction of hosteling into the State parks would improve services to many people, particularly youths and non-auto users. This resulted in a "Hostel Development Plan" published in May 1974. It calls for establishment of 20 hostels within State Parks. Contact: Commissioner, New York State Parks and Recreation, South Swan Street Building, Albany, N.Y. 12223.

New York. New York City's police department is stepping up efforts to protect bicyclists. A 2-day bicycle safety seminar organized by the Traffic Division October 3-4, 1974, kicked off a continuing campaign for stronger enforcement of traffic laws. Traffic safety officers of the city's 76 precincts attended. Contact: Bicycle Institute of America, Inc., 122 E. 42nd St., New York, N.Y. 10017.

North Carolina. The State employs a full-time Bicycle Coordinator, recently held a State Bikeway Planning Seminar attended by 300 persons, and is preparing a "Bikeway Planning Handbook" for use by local communities. Contact: Curtis Yates, Bicycle Coordinator, Department of Transportation and Highway Safety, Raleigh, N.C. 27611.

North Carolina. The city of Raleigh, N.C., has developed a Greenways Plan to utilize the river corridors of the city in a series of local park areas connected by bikeways. The system also will provide cycling access to several shopping areas. Contact: Frank Evans, Director, City Parks and Recreation Department, P.O. Box 590, Raleigh, N.C. 27602.

Pennsylvania. A non-profit center devoted to bicycle and pedestrian research has been opened by Ralph B. Hirsch, Associate Professor of Urban Planning at Drexel University and a leading authority on bicycling. Called the Center for Bicycle and Pedestrian Transportation Research, Inc., it will focus attention on people-powered transportation for recreation and commuting. Contact: Ralph B. Hirsch, The Center for Bicycle and Pedestrian Transportation Research, Inc., 400 Market Street, Philadelphia, Pa. 19106.

South Carolina. The State recently conducted a State Bikeway Planning Conference with over 150 recreation and transportation professionals attending. Contact: John A. May, State Liaison Officer, Department of Parks, Recreation and Tourism, P.O. Box 1358, Columbia, S.C. 29202.

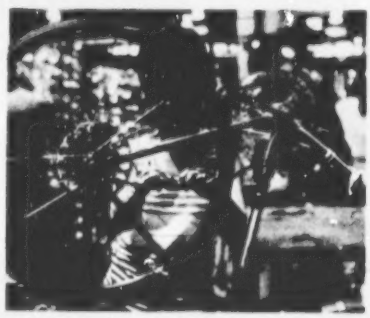
Tennessee. The State is preparing a Comprehensive State Bikeway Plan to guide both the Departments of Transportation and Conservation. Contact: Walter L. Criley, Director, Division of Developmental Planning, Department of Conservation, 2611 West End Avenue, Nashville, Tenn. 37203.

Tennessee. The city of Knoxville has developed two projects combining recreation and transportation values. Contact: John Ulmer, Knoxville Community Development Corporation, 901 Broadway, N.E., Knoxville, Tenn. 37917.

Virginia. Arlington County, Va., is developing a hiking-biking trail system assisted by a $100,000 Land and Water Conservation Fund grant and a $50,000 State grant. The 4.5-mile trail ties into existing Four Mile Run Trail as the second step in a countywide trail network. It will link various parks, serve as a safe route for school children, and eventually provide an alternative to auto commuting. Contact: Rob R. Blackmore, Director, Virginia Commission of Outdoor Recreation, 803 East Broad Street, Richmond, Va. 23219.

Private

The *Cub Scouting Division, Boy Scouts of America*, began a Cub Scout Bicycle Safety Program in 1974. It will be continued in May 1975, to correspond with National Bicycle Safety Week. Emphasis will be placed on development of Cub Scout bicycling skills by encouraging Cub Scout Packs throughout the Nation to conduct bicycle safety training followed by Bike Rodeos to ensure proper bike maintenance and safe driving. Contact: Edmond T. Hesser, Cub Scouting Division, Boy Scouts of America, North Brunswick, N.J. 08902.



A Huffman Manufacturing Company employee puts the finishing touch on a new Huffy cycle.

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American Revolution Bicentennial Administration, "How to Establish Your Own Low-Cost Accommodation." American Revolution Bicentennial Administration, 736 Jackson Place, N.W., Washington, D.C. 20276, 1975. Price unestablished. Available Spring, 1975.

American Youth Hostels, Inc., Catalog of AYH Publications and Literature. American Youth Hostels, Inc., National Campus, Delaplane, Va. 22025, 1974.

Citizens' Advisory Committee on Environmental Quality, "From Rails to Trails." Citizens' Advisory Committee on Environmental Quality, 1700 Pennsylvania Ave., N.W., Washington, D.C. 20006, anticipated publication date, December 1974. The report is directed to community leaders, State and local recreation planners, and interested citizens. Each step, from locating an abandoned right-of-way to laying a finished trail surface, is described. It is anticipated that the 50-page report will be available from the Government Printing Office, Washington, D.C. 20402.

Friends for Bikecology, "Discovering Santa Barbara . . . Without a Car—A Guide for People Using Bicycles, Buses, the Train, Horses, or Walking." Friends for Bikecology, 1035 E. De la Guerra St., Santa Barbara, Calif. 93103, 1974. 67 pp. Price $2.00. A good example for trail planners of a method for informing the public of available bicycling facilities, low cost accommodations, and support facilities in a given area.

Jarrell, Temple R., "Bikeways—Design—Construction—Programs." National Recreation and Park Association, 1601 Kent St., Arlington, Va. 22209, 1974. Price, $5. Special Publications Series No 10022.

U.S. Department of the Interior, "Bicycling." Bureau of Outdoor Recreation, Department of the Interior, Washington, D.C. 20240, 1974. 4 pp. A bibliography of publications and case studies prepared by Federal, State, local, and private agencies.

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